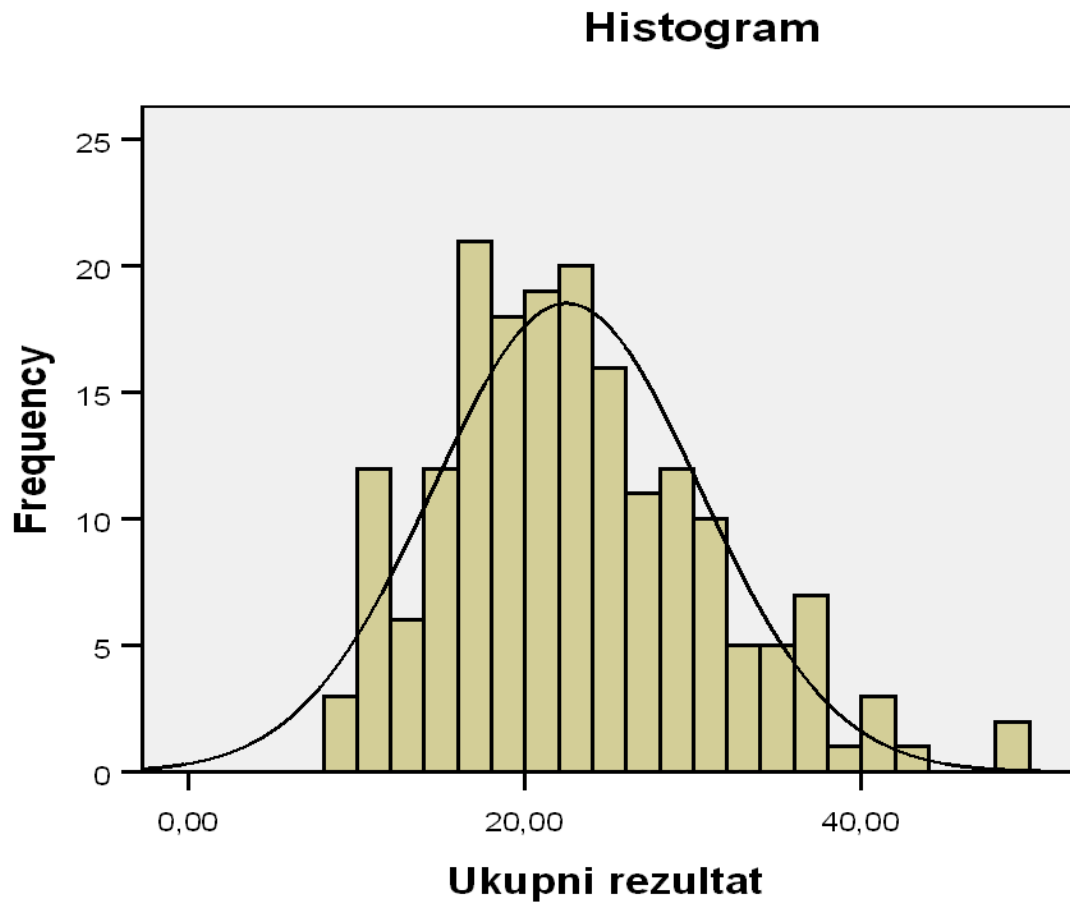


**METRIJSKA ANALIZA
NACIONALNOGA ISPITA IZ
INFORMATIKE ZA PRIRODOSLOVNO-
MATEMATIČKE GIMNAZIJE
PROVEDENOGA U SVIBNJU 2008.**

Istraživačko-razvojni odjel
NCVVO

Raspodjela ukupnih rezultata

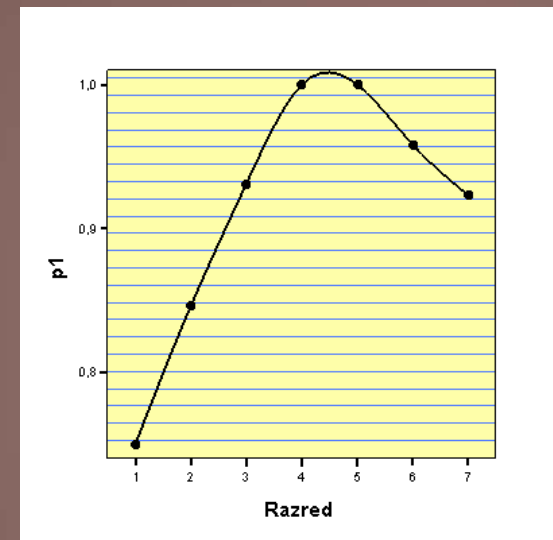
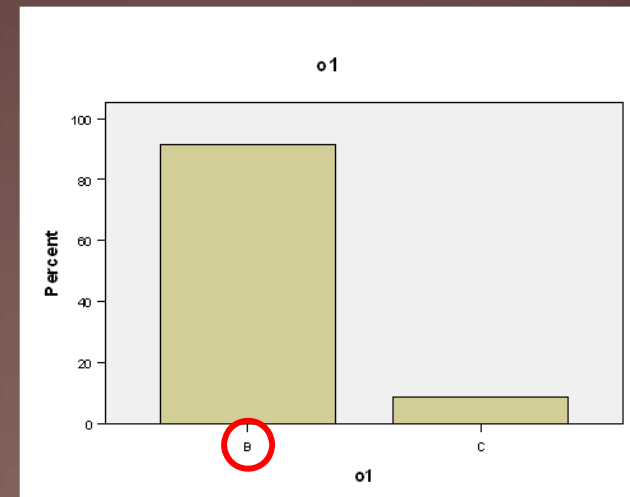


- $N = 184$
- $M = 22.46$
- $SD = 7.922$
- $MIN = 8; MAX = 49$
- Max. mogući rezultat = 50
- Cronbach $\alpha = 0.87$

| Težina zadatka | Redni broj zadatka |
|---------------------------------------|--|
| Vrlo težak (0 – 0,2) | 5, 11, 12C, 12D, 13, 15, 18, 19, 36, 38, 39, 40, 41, 42, 48.4, 48.5, 49.1 |
| Težak (0,21 – 0,4) | 4, 6, 16, 20, 21, 22, 23, 26, 27, 32, 34, 35, 37, 43, 44, 48.2, 49.2, 49.3, 50 |
| Srednje težak (0,41 – 0,6) | 3, 14, 25, 33, 46, 47, 48.1, 48.3 |
| Lagan (0,61 – 0,80) | 8, 9, 10, 12A, 12B, 12E, 17, 24, 31, 45 |
| Vrlo lagan (0,81 – 1) | 1, 2, 7, 28, 29, 30 |

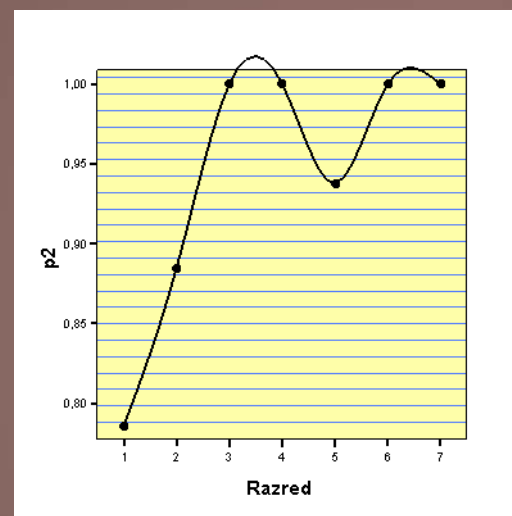
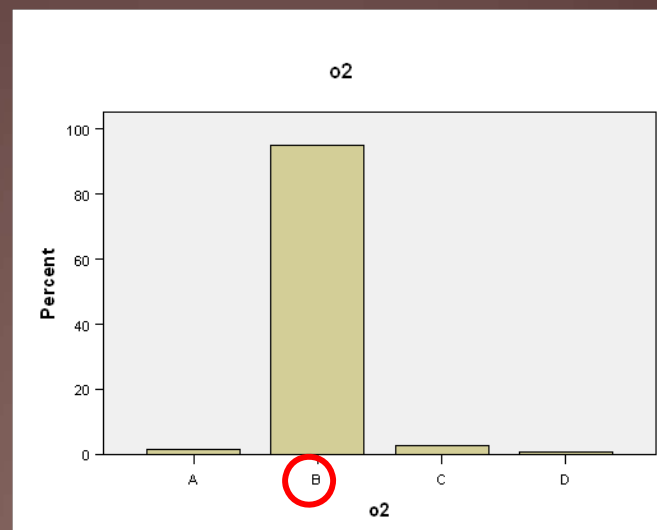
1. Koju skupinu nastavaka datoteka čine samo tekstualne datoteke?

| | |
|--------------------------------------|--------------|
| M | 0.91 |
| SD | 0.283 |
| ID | 0.155 |
| α - zadatak | 0.864 |



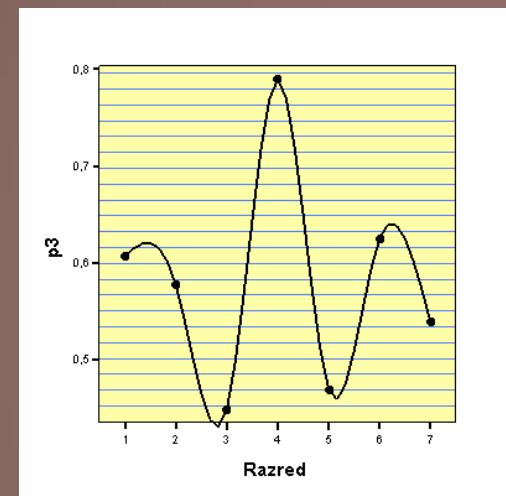
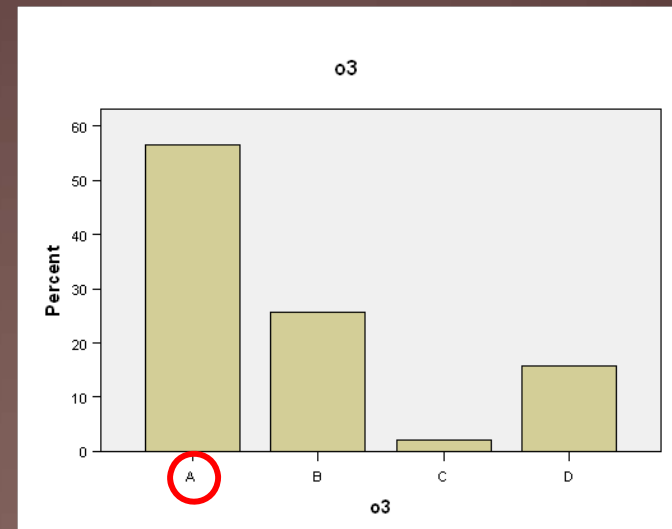
2. Koji je program namijenjen pregledavanju web stranica?

| | |
|--|--------------|
| M | 0.94 |
| SD | 0.238 |
| ID | 0.206 |
| α - zadatak | 0.864 |



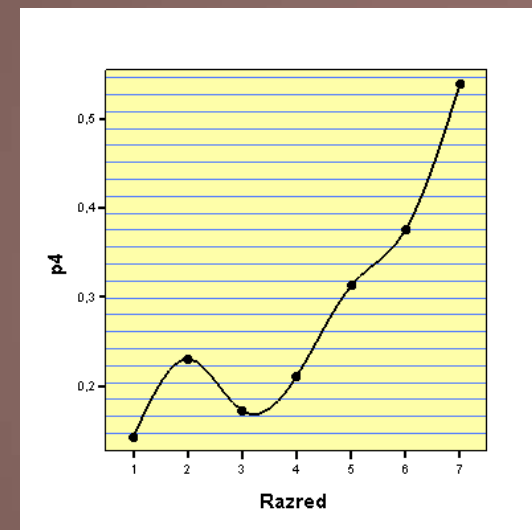
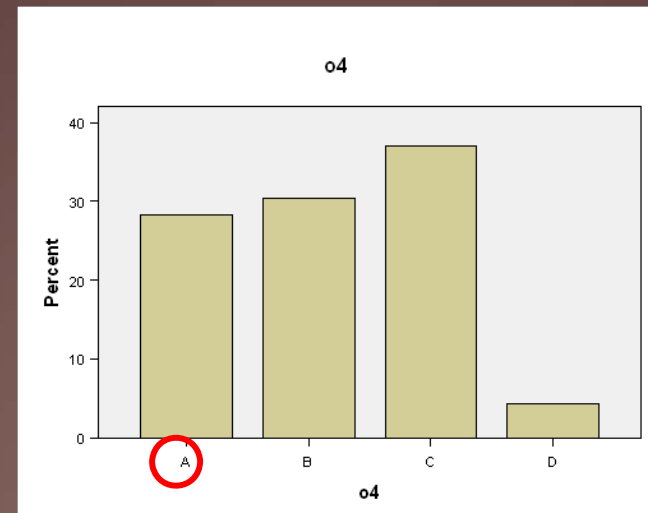
3. Kako se zove protokol za razmjenu podataka između klijenata i poslužitelja...?

| | |
|--|---------------|
| M | 0.57 |
| SD | 0.497 |
| ID | -0.093 |
| α - zadatak | 0.870 |



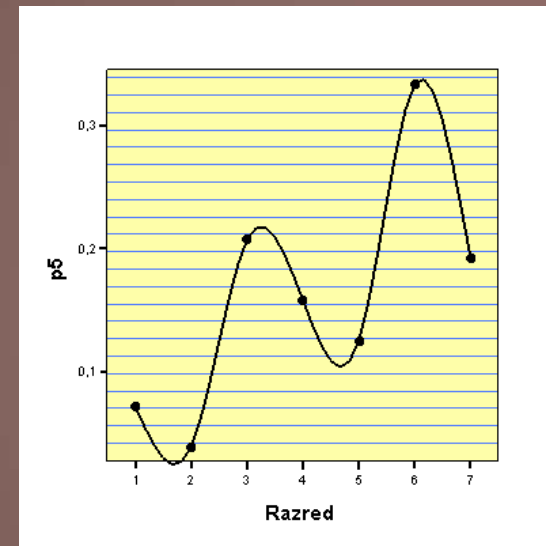
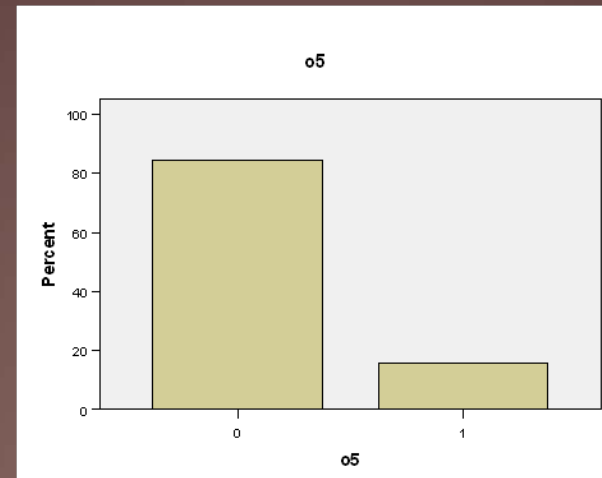
4. Sustav koji prevodi slovčanu adresu web stranice u odgovarajuću brojčanu adresu...?

| | |
|--|--------------|
| M | 0.28 |
| SD | 0.452 |
| ID | 0.222 |
| α - zadatak | 0.864 |



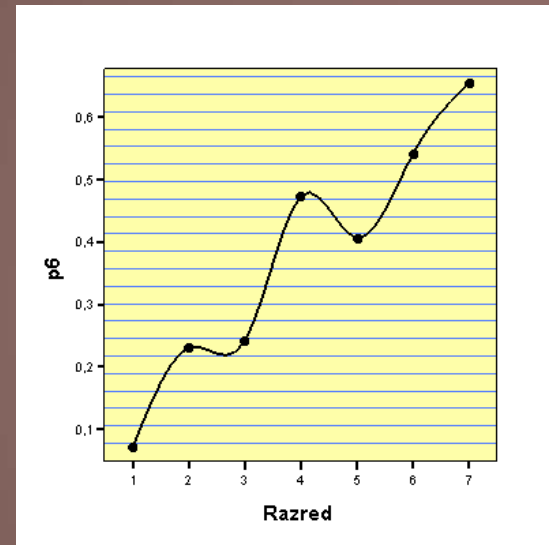
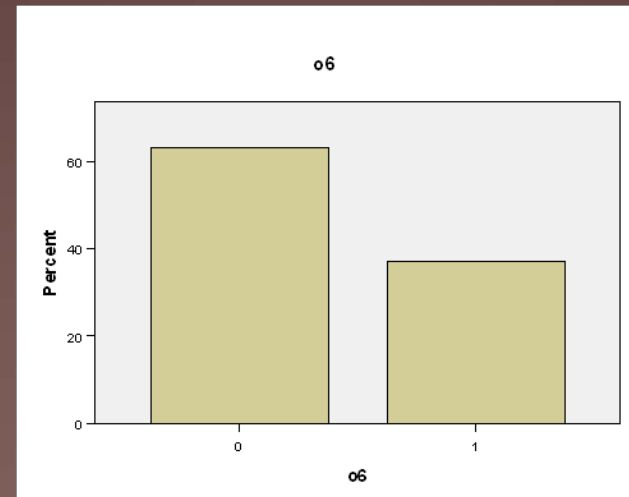
5. U programu za proračunske tablice stvoren je prikazani dio tablice...

| | |
|--|--------------|
| M | 0.16 |
| SD | 0.365 |
| ID | 0.143 |
| α - zadatak | 0.865 |



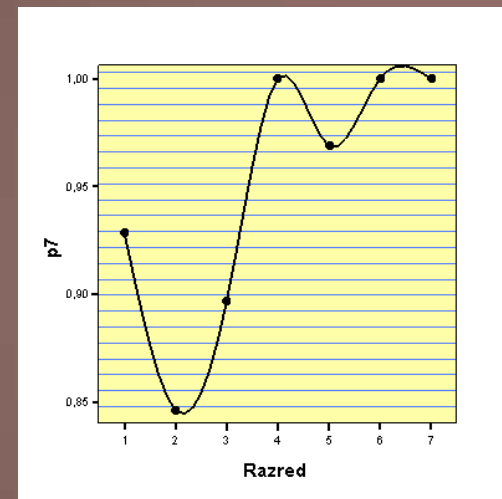
6. U programu za proračunske tablice stvoren je prikazani dio tablice...

| | |
|--|--------------|
| M | 0.36 |
| SD | 0.483 |
| ID | 0.301 |
| α - zadatak | 0.862 |



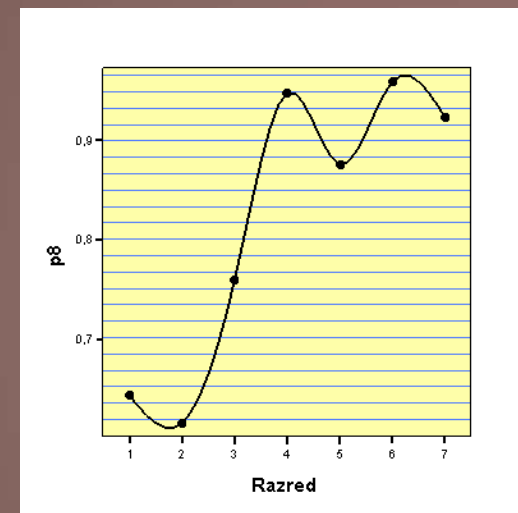
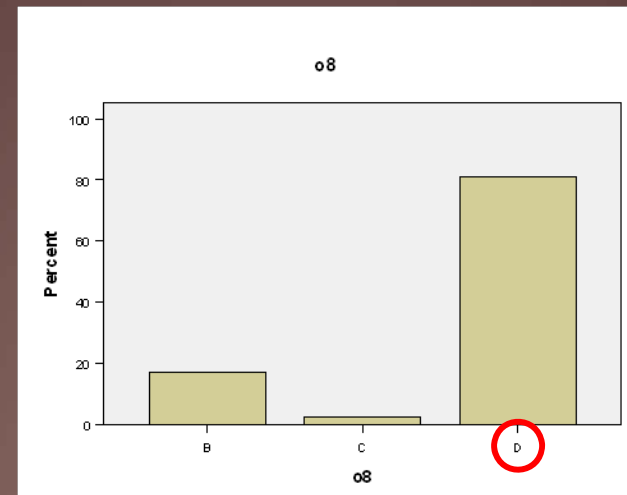
7. Kako se naziva veća organizirana i uređena cjelina međusobno povezanih podataka...?

| | |
|--|--------------|
| M | 0.95 |
| SD | 0.227 |
| ID | 0.123 |
| α - zadatak | 0.864 |



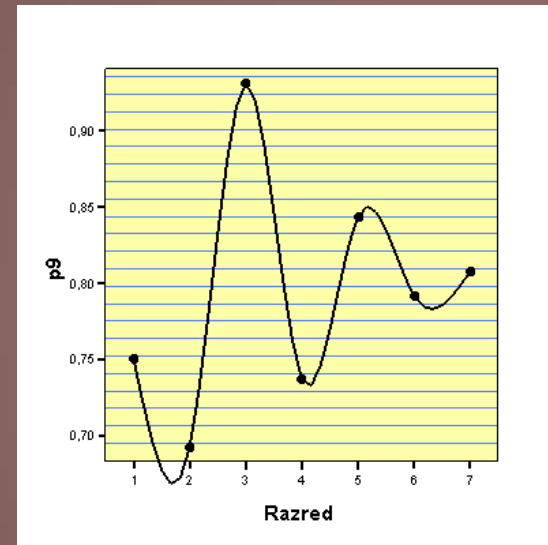
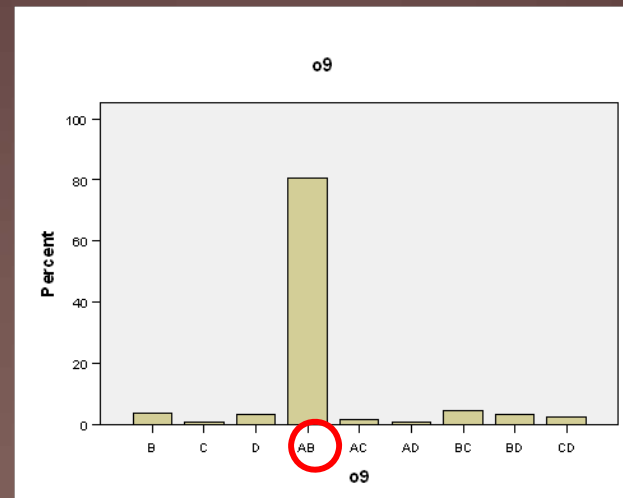
8. Što od navedenoga nije vrsta pisača?

| | |
|--|--------------|
| M | 0.81 |
| SD | 0.394 |
| ID | 0.225 |
| α - zadatak | 0.863 |



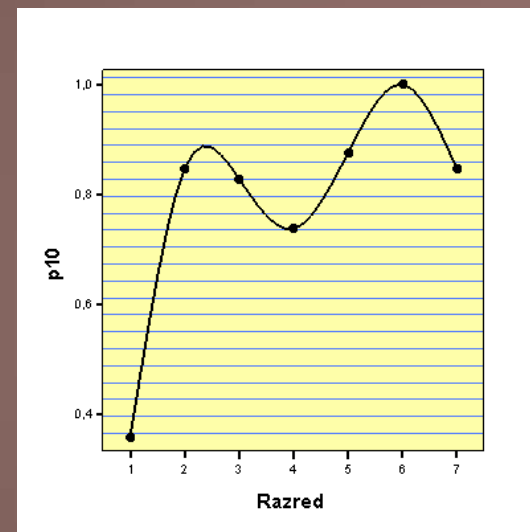
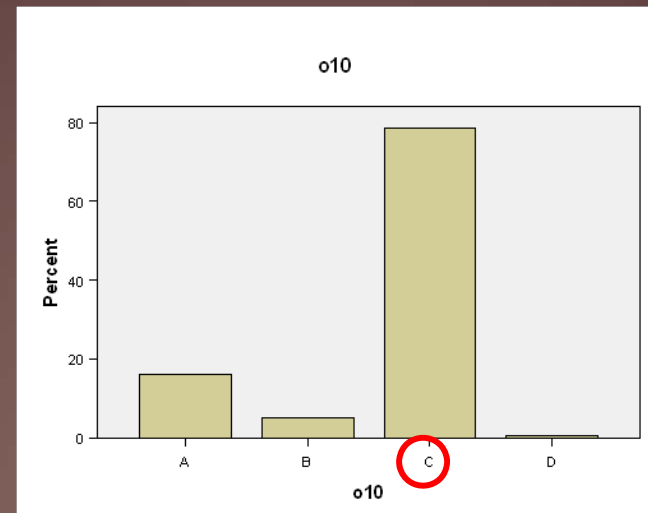
9. Što od navedenoga možemo naći kao oznake vrsta CD-a?

| | |
|--|--------------|
| M | 0.80 |
| SD | 0.402 |
| ID | 0.001 |
| α - zadatak | 0.867 |



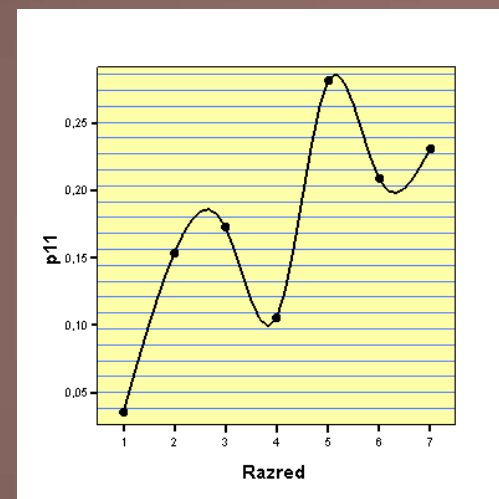
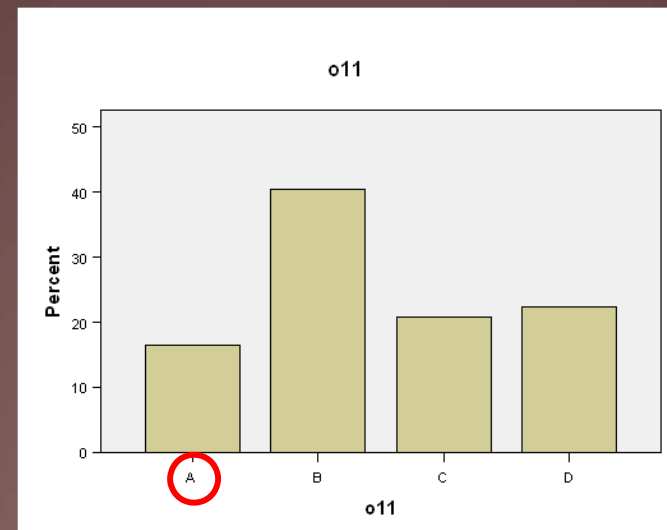
10. Koja oznaka označava trajnu memoriju računala koja se može samo čitati?

| | |
|--|--------------|
| M | 0.78 |
| SD | 0.414 |
| ID | 0.266 |
| α - zadatak | 0.863 |



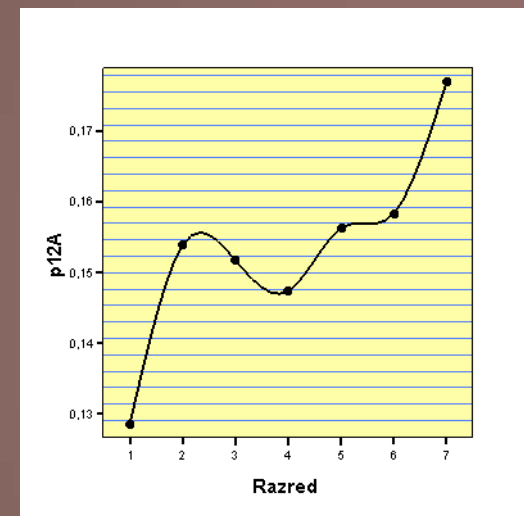
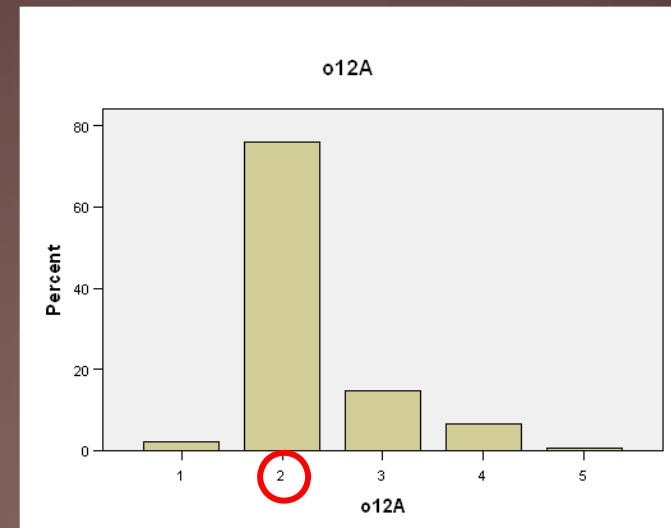
11. Kako se zove uređaj koji omogućuje komunikaciju računala...?

| | |
|--|--------------|
| M | 0.17 |
| SD | 0.380 |
| ID | 0.121 |
| α - zadatak | 0.865 |



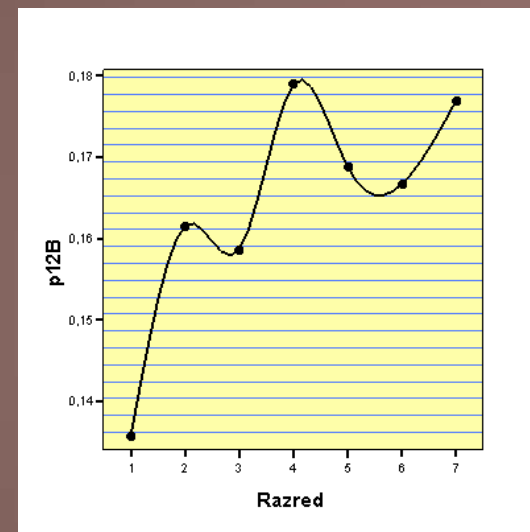
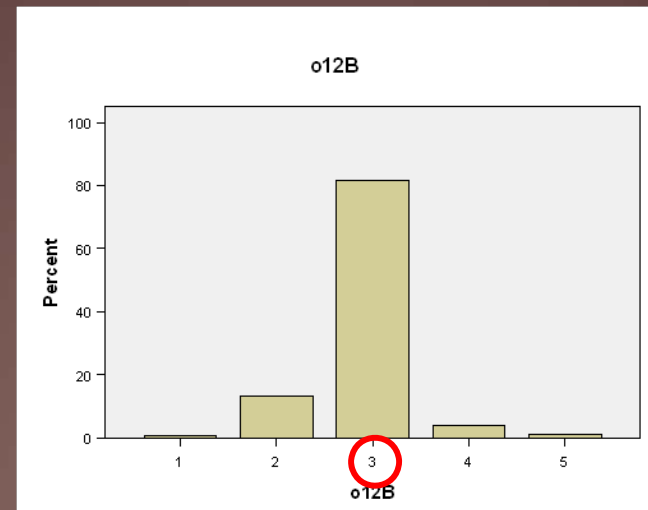
12.A Poredajte izražene količine memorije po veličini

| | |
|--|--------------|
| M | 0.15 |
| SD | 0.085 |
| ID | 0.137 |
| α - zadatak | 0.864 |



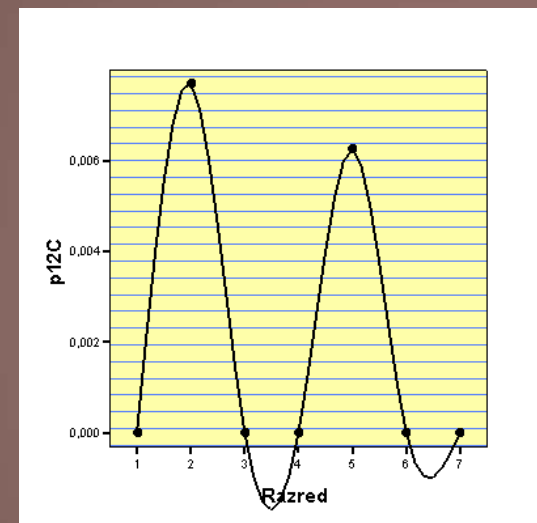
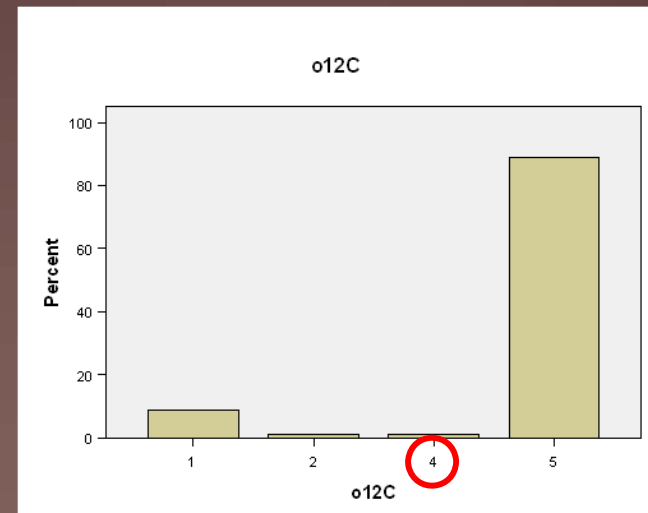
12.B Poredajte izražene količine memorije po veličini

| | |
|--|--------------|
| M | 0.16 |
| SD | 0.078 |
| ID | 0.127 |
| α - zadatak | 0.864 |



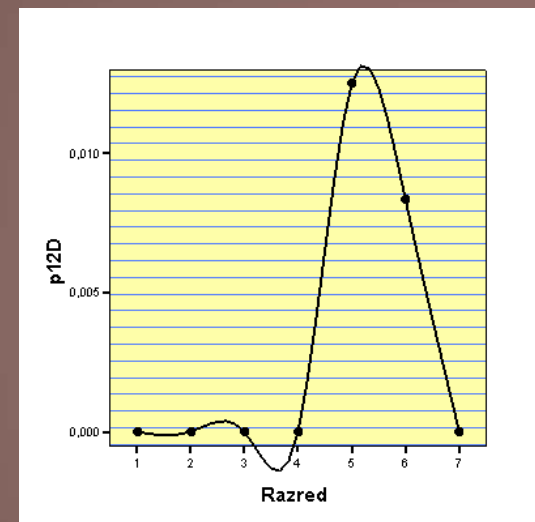
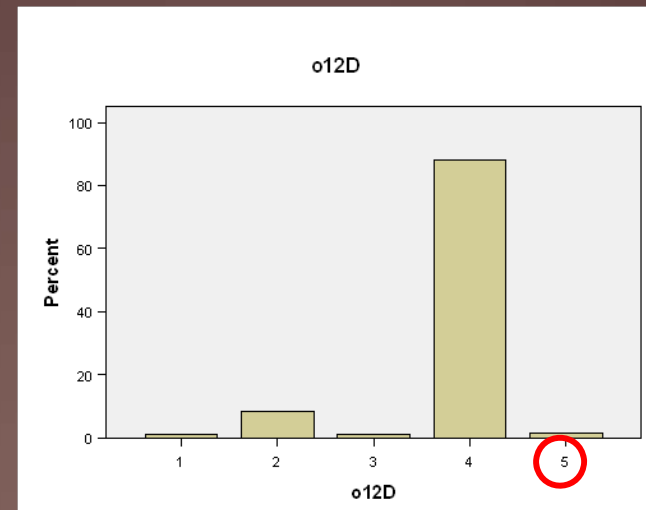
12.C Poredajte izražene količine memorije po veličini

| | |
|--|---------------|
| M | 0.002 |
| SD | 0.021 |
| ID | -0.040 |
| α - zadatak | 0.865 |



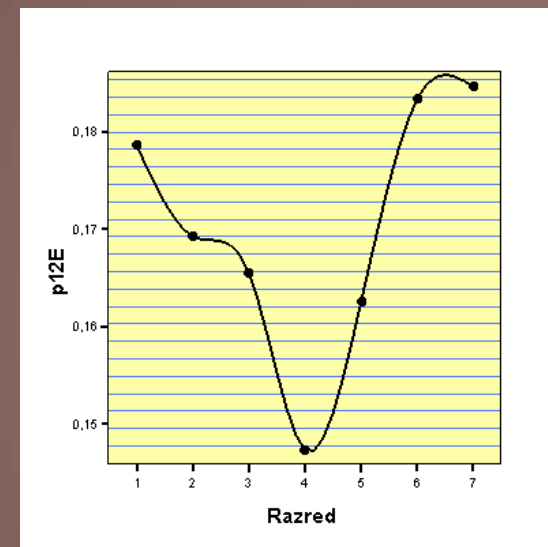
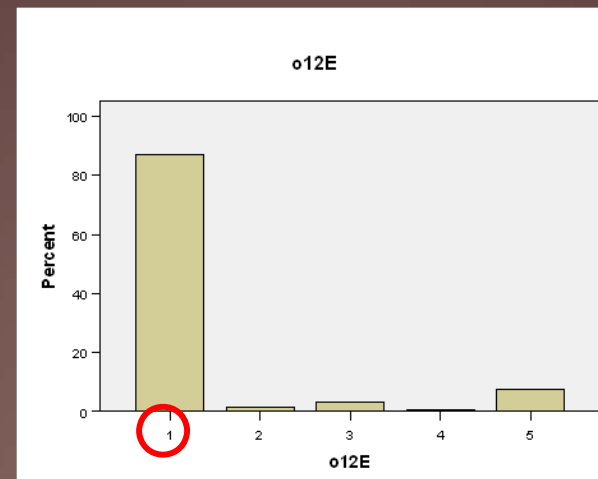
12.D Poredajte izražene količine memorije po veličini

| | |
|--|--------------|
| M | 0.003 |
| SD | 0.025 |
| ID | 0.056 |
| α - zadatak | 0.865 |



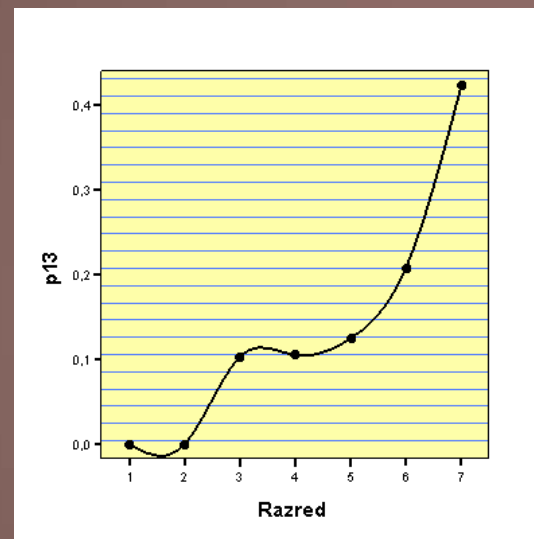
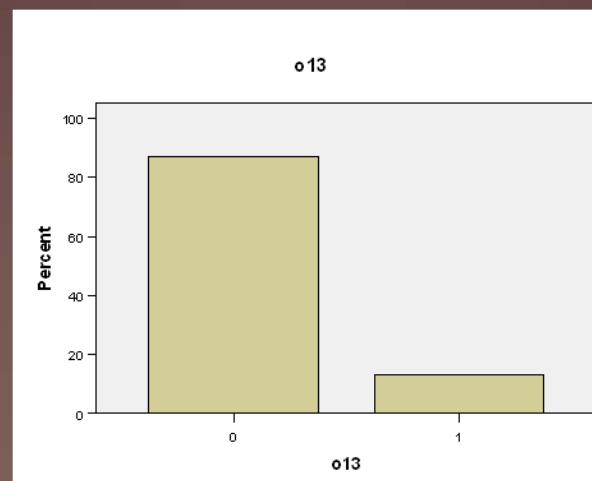
12.E Poredajte izražene količine memorije po veličini

| | |
|--|--------------|
| M | 0.17 |
| SD | 0.071 |
| ID | 0.051 |
| α - zadatak | 0.865 |



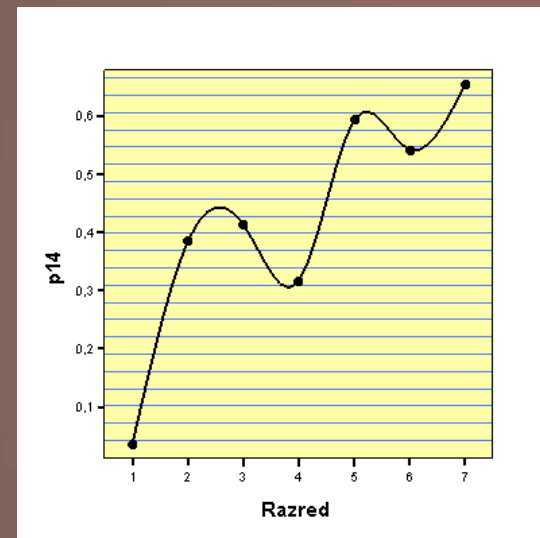
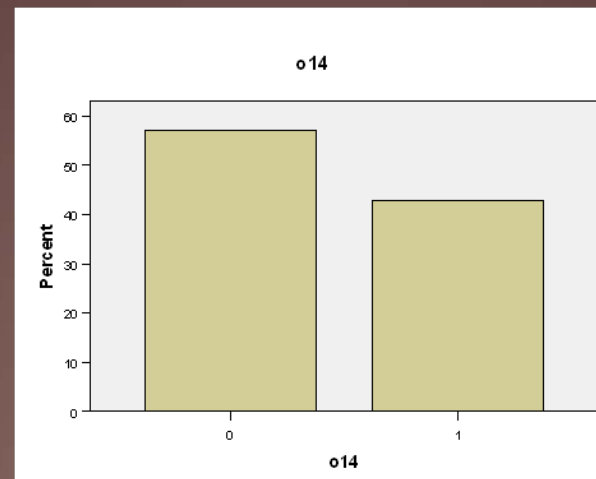
13. Koliko je ukupno znakova moguće pohraniti na memorijski prostor veličine 1 MB...?

| | |
|--|--------------|
| M | 0.14 |
| SD | 0.344 |
| ID | 0.348 |
| α - zadatak | 0.862 |



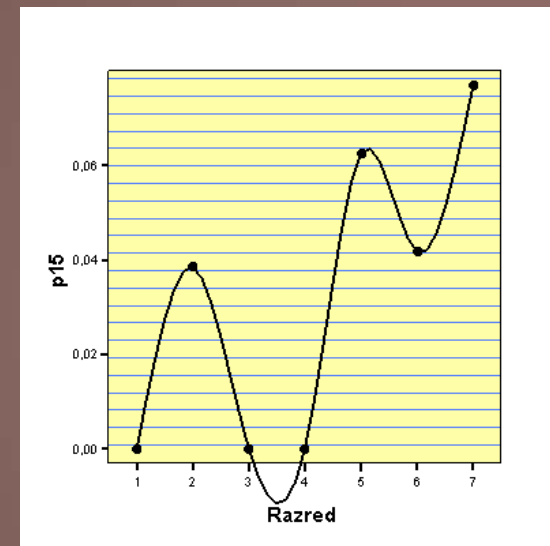
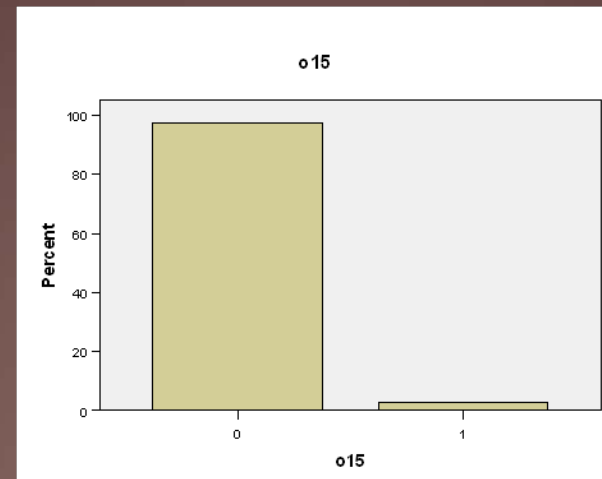
14. Koliko znamenaka ima heksadekadski broj (DEDA)16 u binarnome brojevnome sustavu?

| | |
|--|--------------|
| M | 0.42 |
| SD | 0.496 |
| ID | 0.274 |
| α - zadatak | 0.863 |



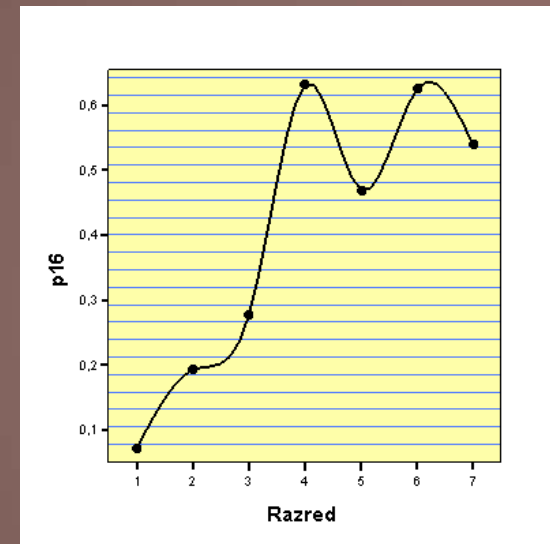
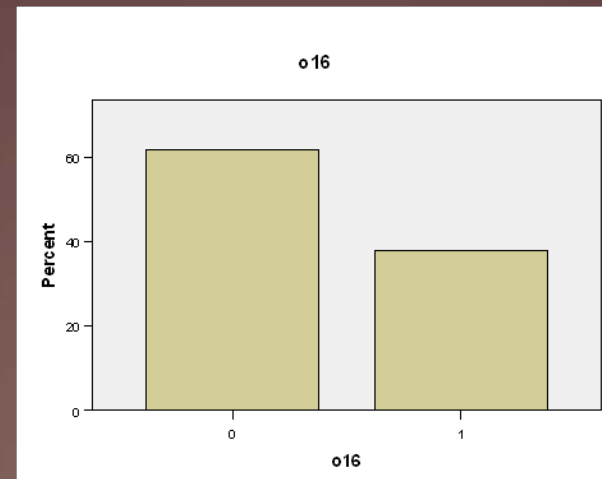
15. Koji je najmanji cijeli broj (u dekadskome brojevnome sustavu) koji se može pohraniti u 8-bitovni registar?

| | |
|--|--------------|
| M | 0.03 |
| SD | 0.178 |
| ID | 0.163 |
| α - zadatak | 0.864 |



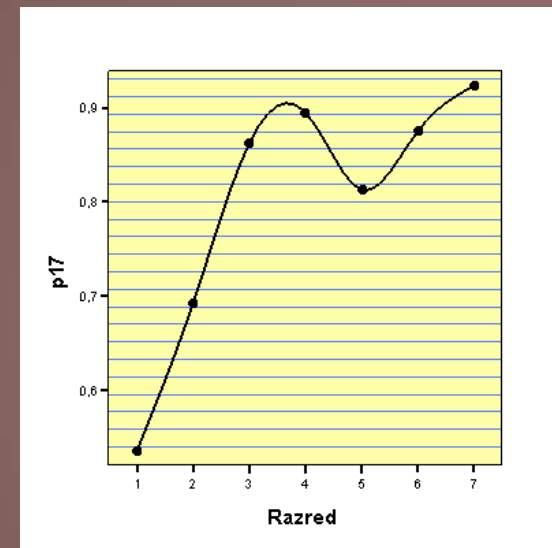
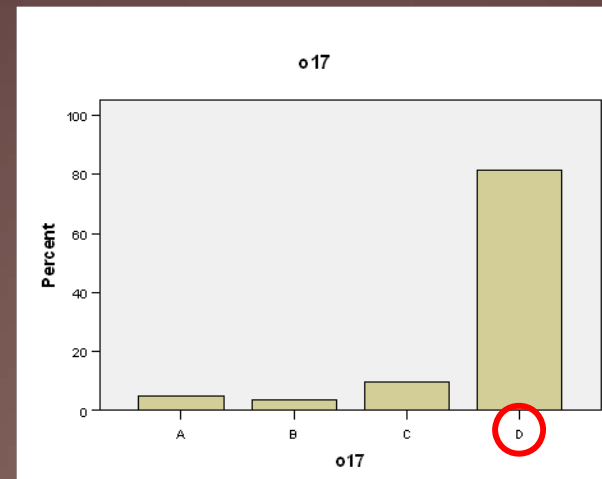
16. Ako je na 66. mjestu u ASCII tablici zapisano slovo B, koji je znak u ASCII tablici zapisan na 99. mjestu?

| | |
|--|--------------|
| M | 0.39 |
| SD | 0.488 |
| ID | 0.275 |
| α - zadatak | 0.863 |



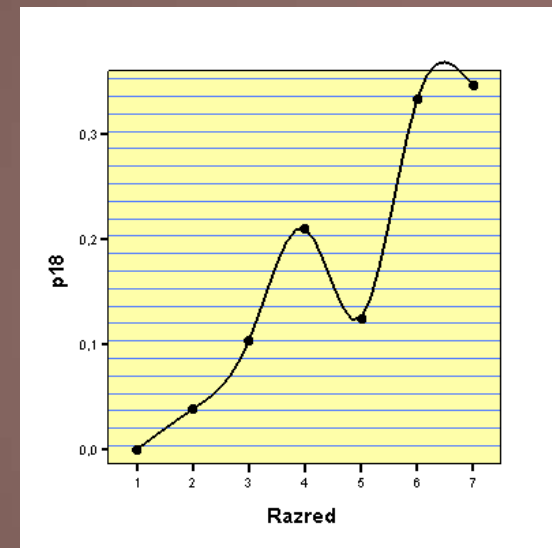
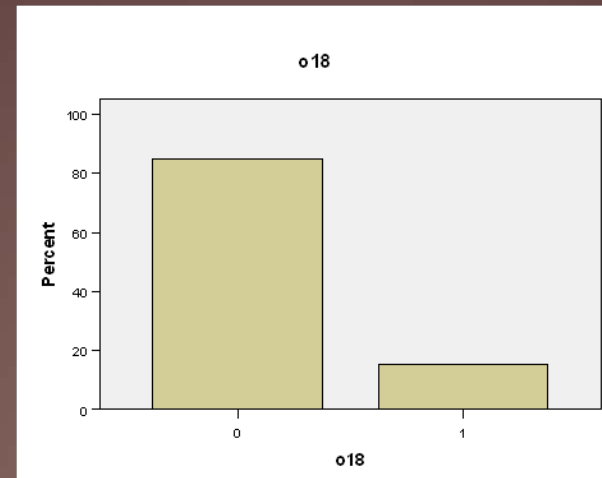
17. Kakav je izgled otisnutoga teksta...?

| | |
|--|--------------|
| M | 0.79 |
| SD | 0.406 |
| ID | 0.210 |
| α - zadatak | 0.864 |



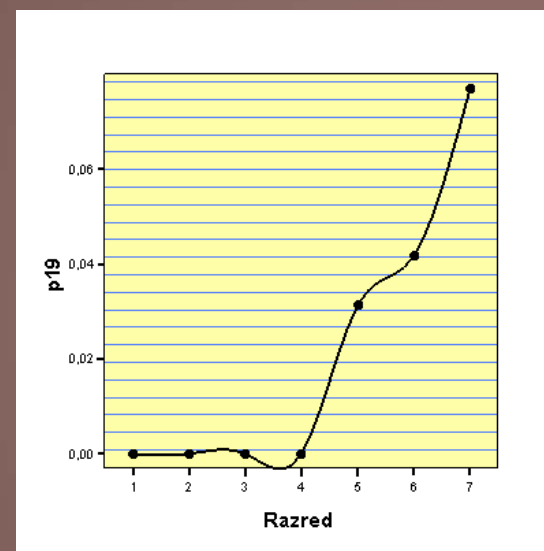
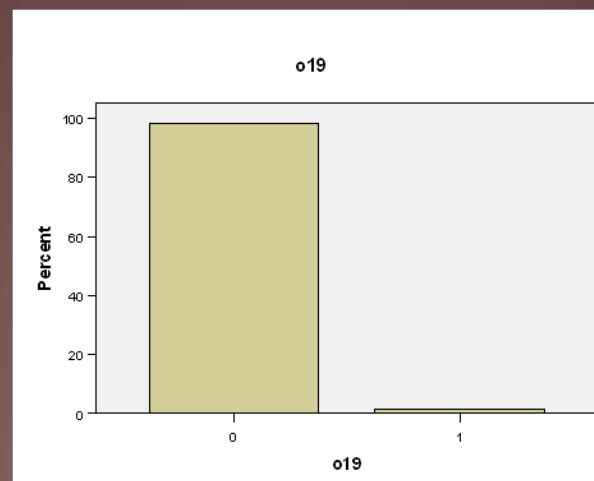
18. Za koliko će različitih vrijednosti trojki logičkih varijabli...?

| | |
|--|--------------|
| M | 0.16 |
| SD | 0.365 |
| ID | 0.284 |
| α - zadatak | 0.863 |



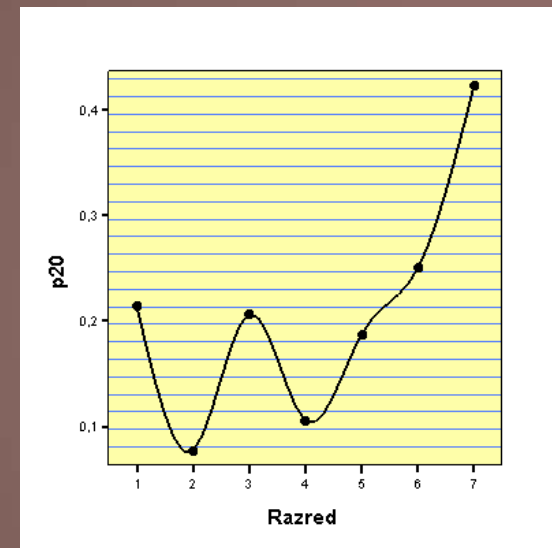
19. Logički izraz

| | |
|--|--------------|
| M | 0.02 |
| SD | 0.146 |
| ID | 0.140 |
| α - zadatak | 0.864 |



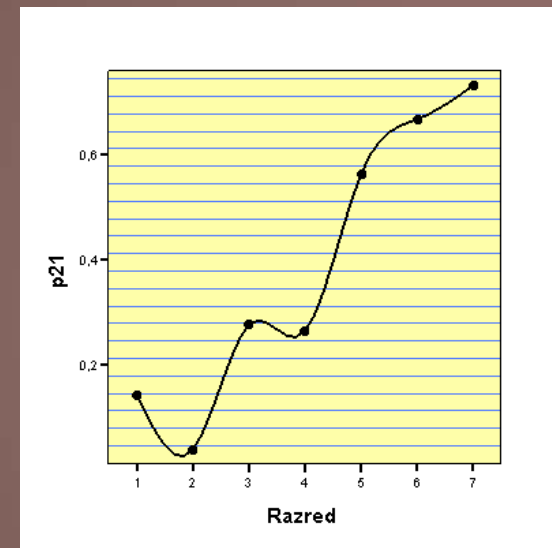
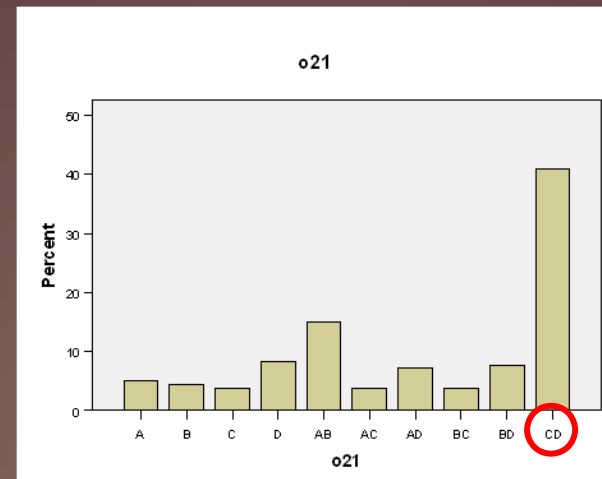
20. Nakon pojednostavljenja logički izraz imat će oblik...?

| | |
|--|--------------|
| M | 0.21 |
| SD | 0.410 |
| ID | 0.132 |
| α - zadatak | 0.865 |



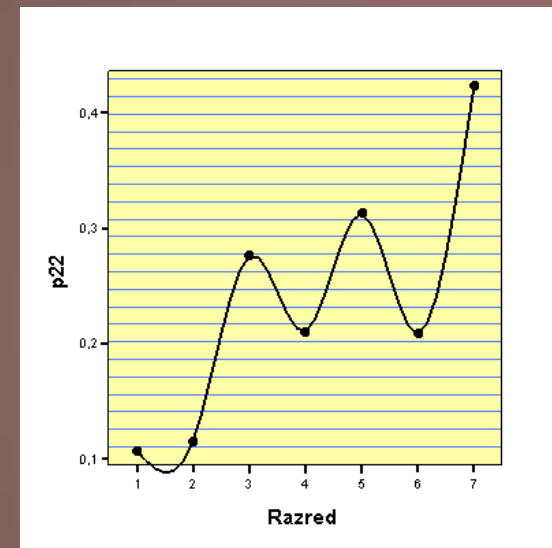
21. Za koje će od sljedećih četvorki logičkih varijabli...?

| | |
|--|--------------|
| M | 0.39 |
| SD | 0.488 |
| ID | 0.440 |
| α - zadatak | 0.860 |



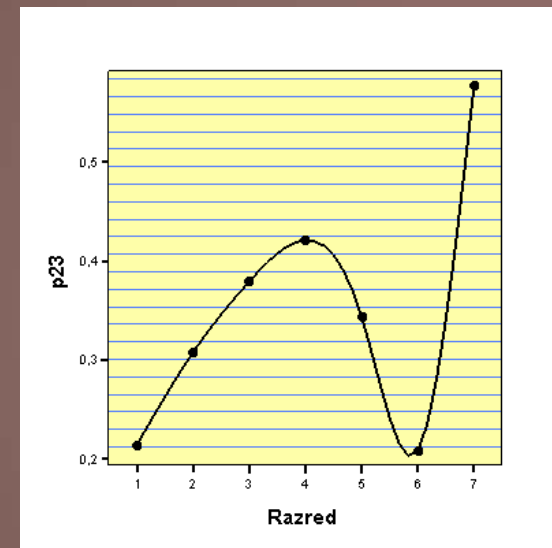
22. Koji pojednostavljeni logički izraz ostvaruje sljedeći logički sklop?

| | |
|--|--------------|
| M | 0.24 |
| SD | 0.428 |
| ID | 0.175 |
| α - zadatak | 0.864 |



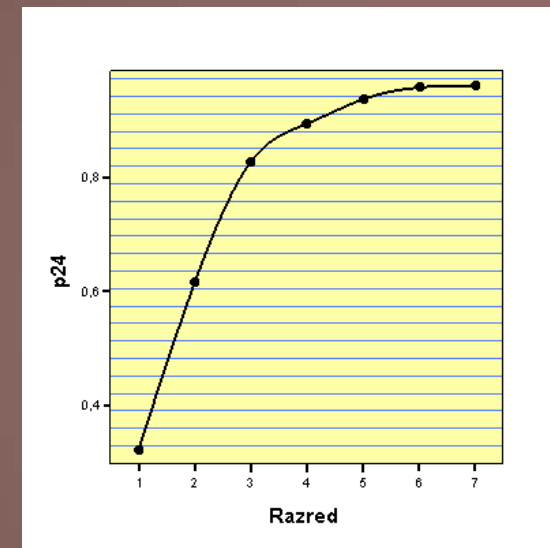
23. Deklarirane su dvije varijable A i B tipa byte.

| | |
|--|--------------|
| M | 0.35 |
| SD | 0.478 |
| ID | 0.137 |
| α - zadatak | 0.865 |



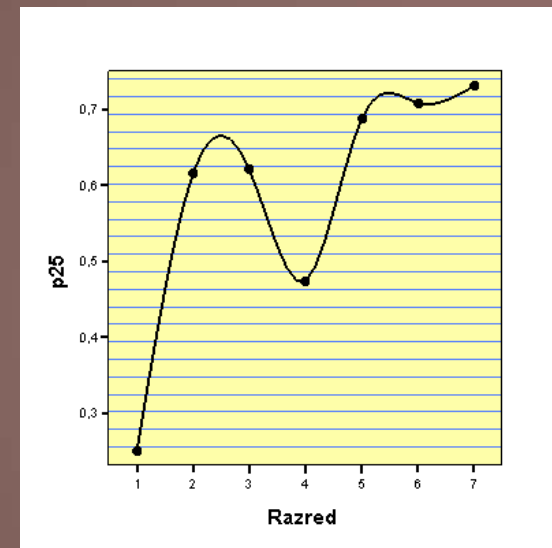
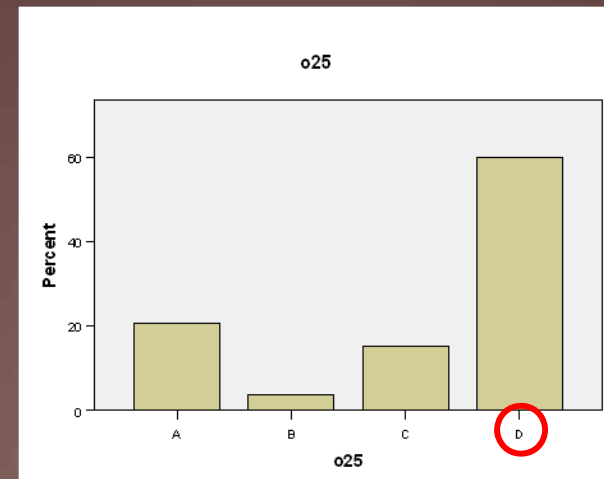
24. Kolika je vrijednost cjelobrojne varijable x nakon izvođenja sljedeće naredbe...?

| | |
|--|--------------|
| M | 0.78 |
| SD | 0.414 |
| ID | 0.409 |
| α - zadatak | 0.860 |



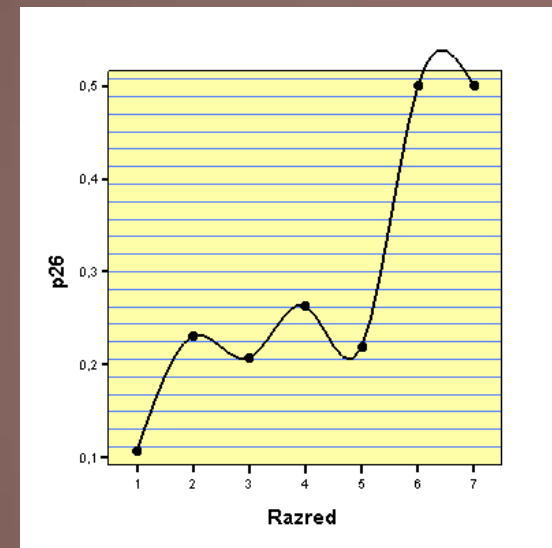
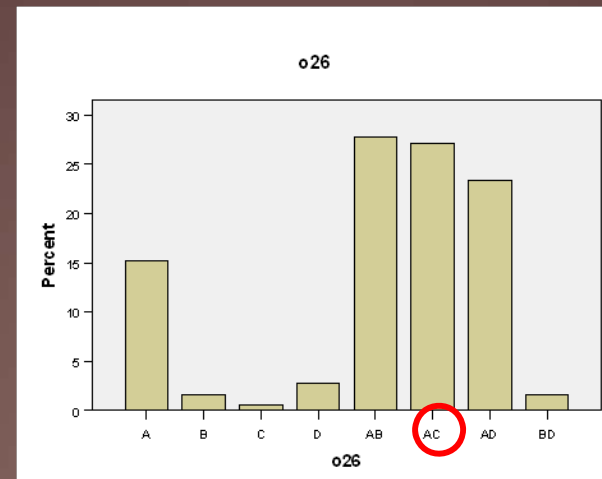
25. Kolika je vrijednost cjelobrojne varijable x nakon izvođenja sljedeće naredbe...?

| | |
|--|--------------|
| M | 0.59 |
| SD | 0.494 |
| ID | 0.186 |
| α - zadatak | 0.865 |



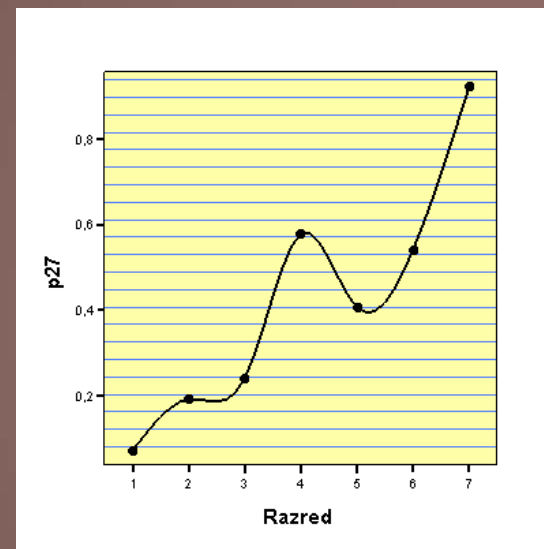
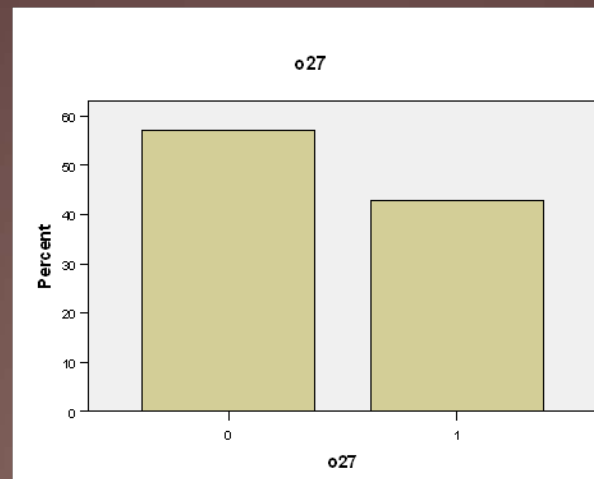
26. Kako može izgledati programska naredba za izračunavanje matematičkog izraza...?

| | |
|--|--------------|
| M | 0.28 |
| SD | 0.452 |
| ID | 0.250 |
| α - zadatak | 0.863 |



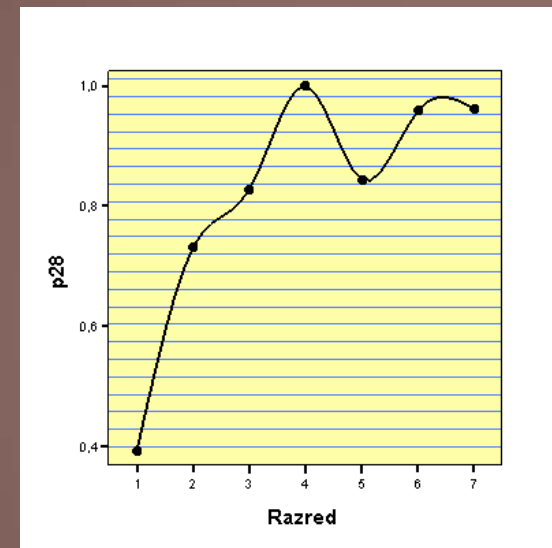
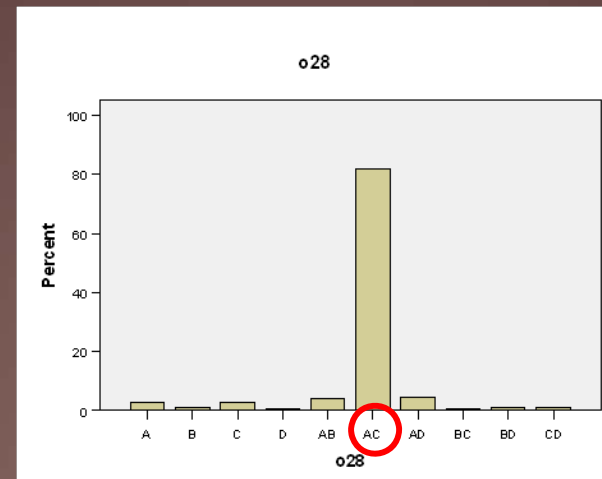
27. Koju će se vrijednost pohraniti u varijablu x nakon izvođenja sljedeće naredbe?

| | |
|--|--------------|
| M | 0.41 |
| SD | 0.493 |
| ID | 0.485 |
| α - zadatak | 0.859 |



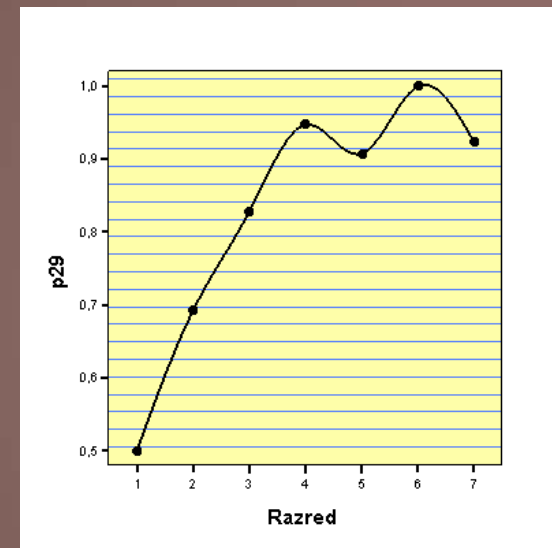
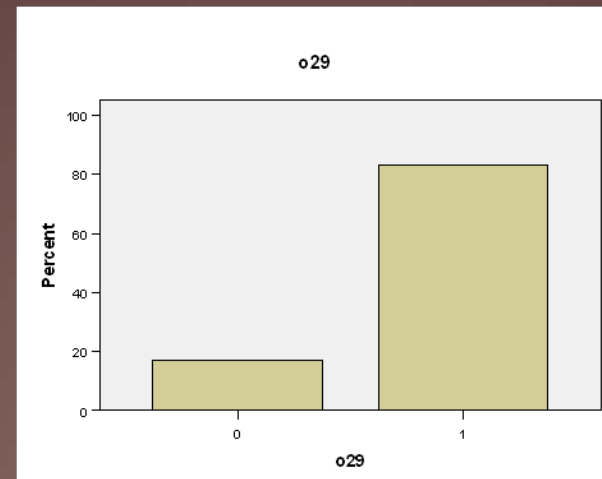
28. U programu je deklarirana cjelobrojna varijabla a, realna varijabla b i logička varijabla c...

| | |
|--|--------------|
| M | 0.80 |
| SD | 0.398 |
| ID | 0.341 |
| α - zadatak | 0.862 |



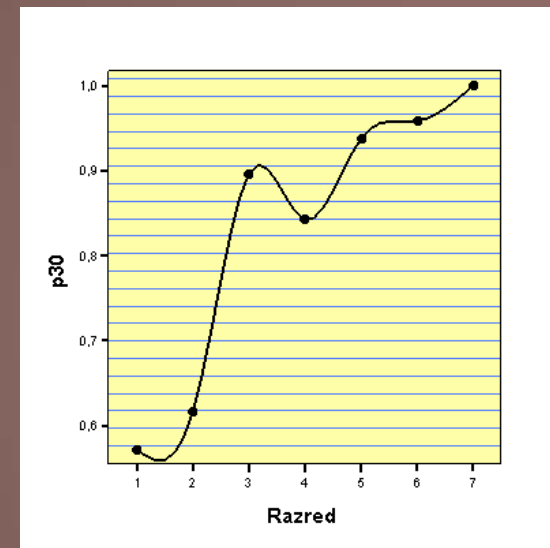
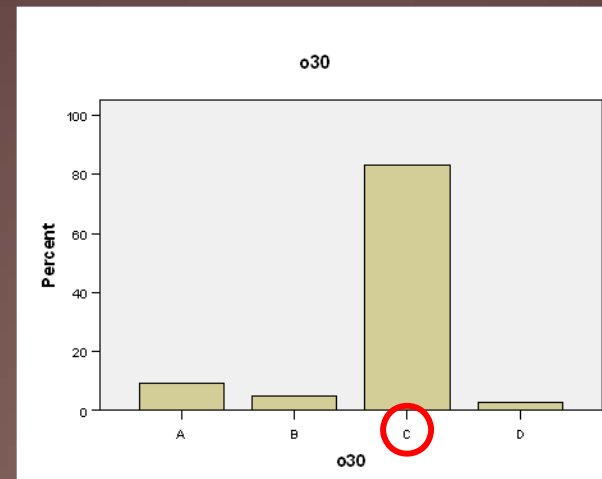
29. Koju će vrijednost ispisati sljedeći algoritam ako n ima vrijednost 25?

| | |
|--|--------------|
| M | 0.82 |
| SD | 0.385 |
| ID | 0.317 |
| α - zadatak | 0.862 |



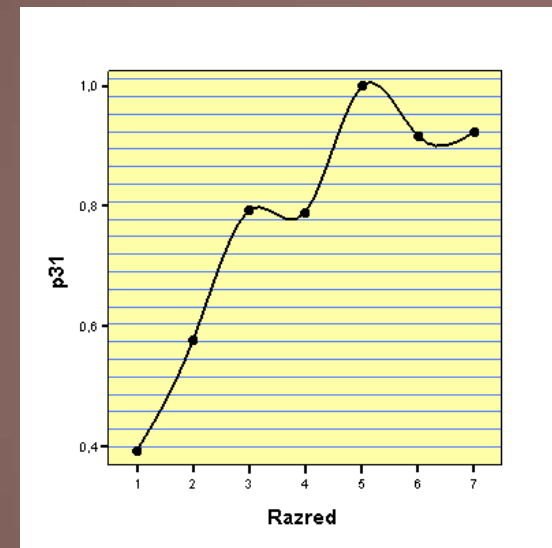
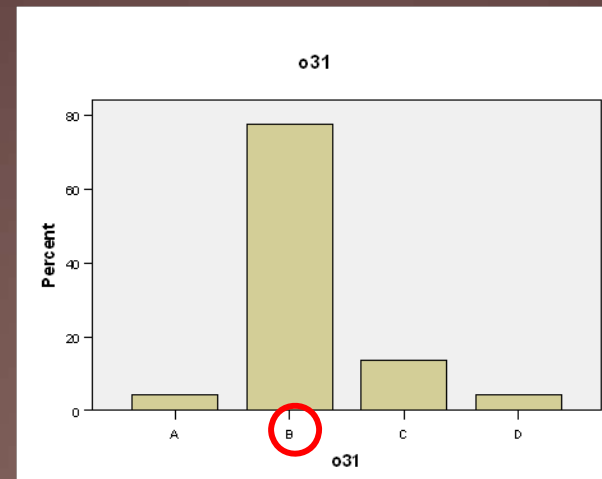
30. Koji će dio programa zamijeniti sadržaje dviju cjelobrojnih varijabli a i b ?

| | |
|--|--------------|
| M | 0.83 |
| SD | 0.375 |
| ID | 0.337 |
| α - zadatak | 0.862 |



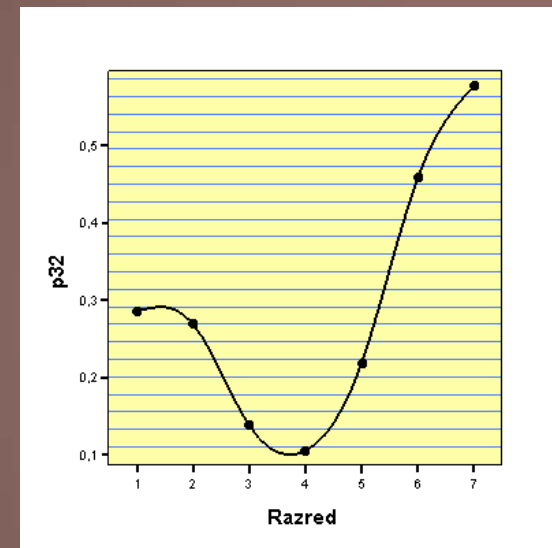
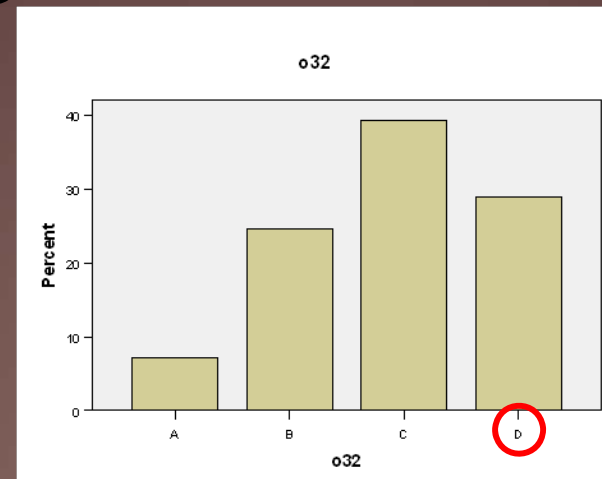
31. Koju će vrijednost ispisati sljedeći algoritam ako n ima vrijednost 11?

| | |
|--|--------------|
| M | 0.77 |
| SD | 0.421 |
| ID | 0.349 |
| α - zadatak | 0.861 |



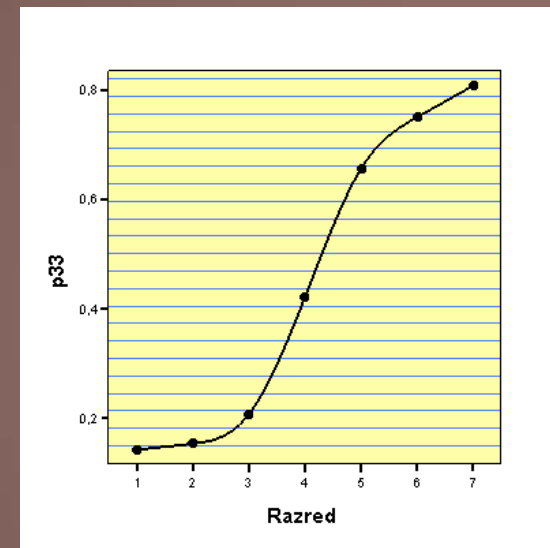
32. Koju će vrijednost poprimiti cjelobrojna varijabla b nakon izvođenja dijela programa?

| | |
|--|--------------|
| M | 0.29 |
| SD | 0.457 |
| ID | 0.191 |
| α - zadatak | 0.864 |



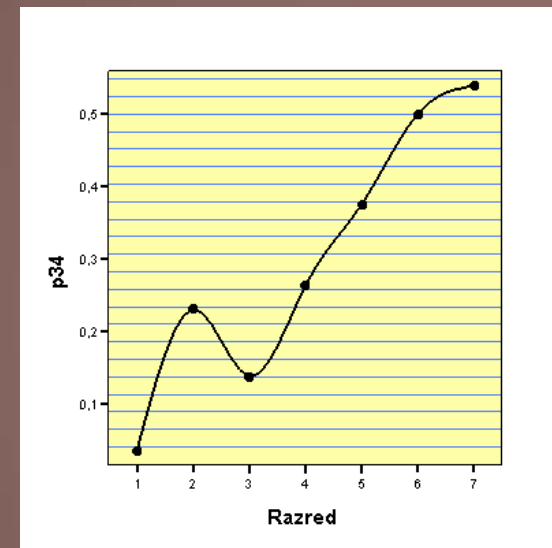
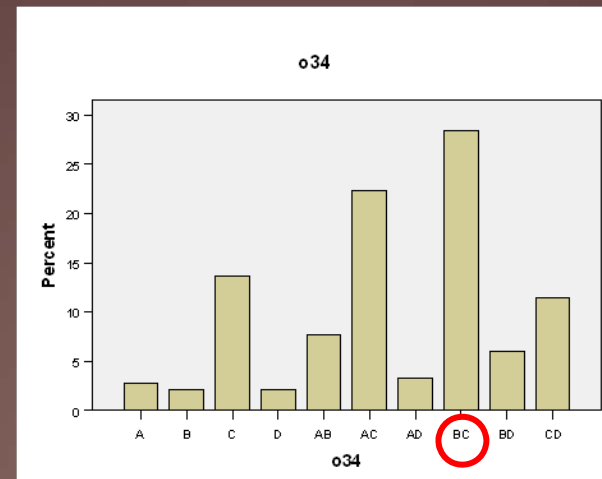
33. Kolika je vrijednost varijable h nakon izvođenja dijela programa?

| | |
|--|--------------|
| M | 0.45 |
| SD | 0.498 |
| ID | 0.455 |
| α - zadatak | 0.859 |



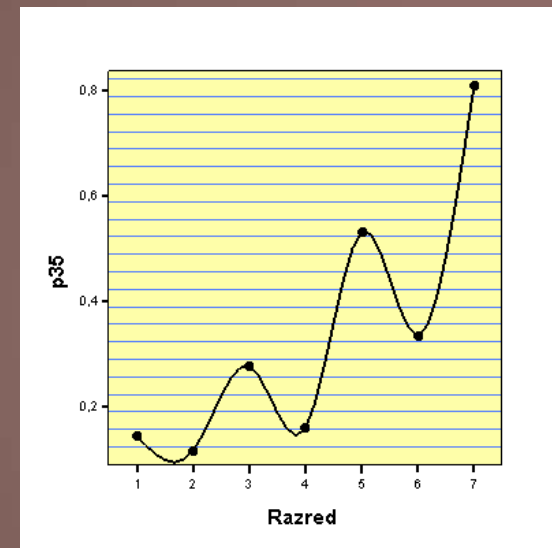
34. Koji će od sljedećih algoritama ispisati broj znamenaka broja n?

| | |
|--|--------------|
| M | 0.29 |
| SD | 0.457 |
| ID | 0.356 |
| α - zadatak | 0.861 |



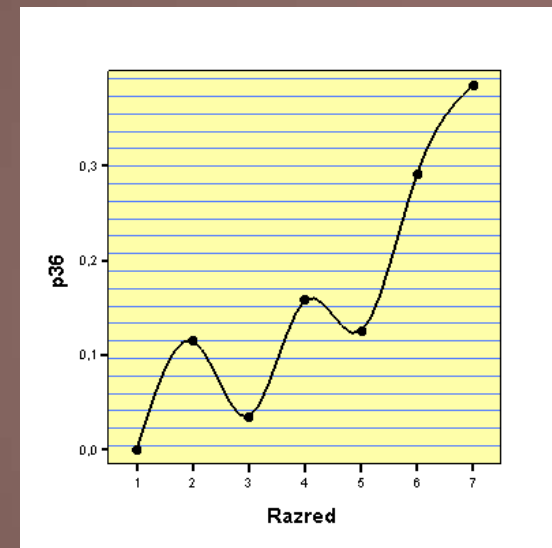
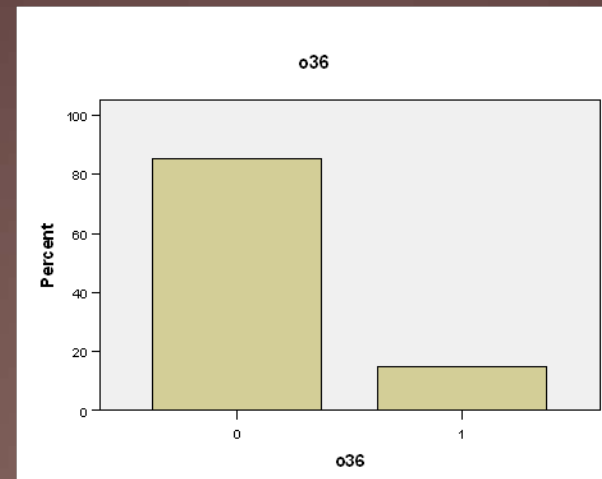
35. Koji će algoritam ispisati srednju vrijednost učitanih brojeva?

| | |
|------------------------|--------------|
| M | 0.35 |
| SD | 0.478 |
| ID | 0.370 |
| α - zadatak | 0.861 |



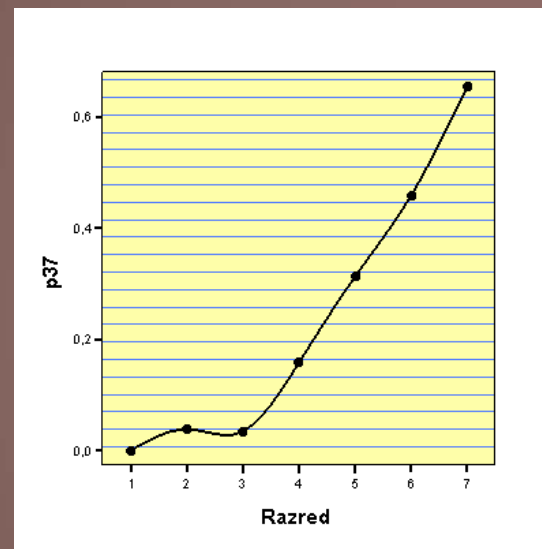
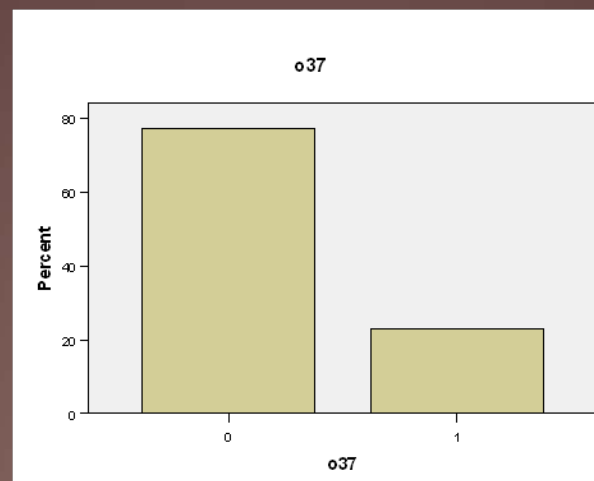
36. Kolika treba biti najmanja vrijednost cjelobrojne varijable y kako sljedeća petlja ne bi bila beskonačna?

| | |
|--|--------------|
| M | 0.15 |
| SD | 0.360 |
| ID | 0.326 |
| α - zadatak | 0.862 |



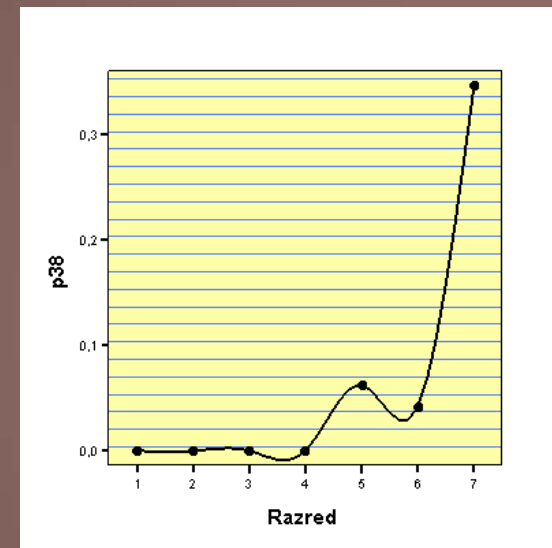
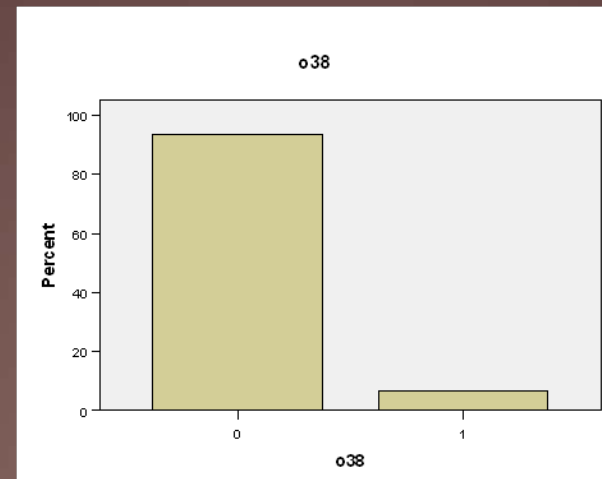
37. Što će pisati u varijabli t nakon izvođenja sljedećega algoritma?

| | |
|--|--------------|
| M | 0.23 |
| SD | 0.424 |
| ID | 0.477 |
| α - zadatak | 0.859 |



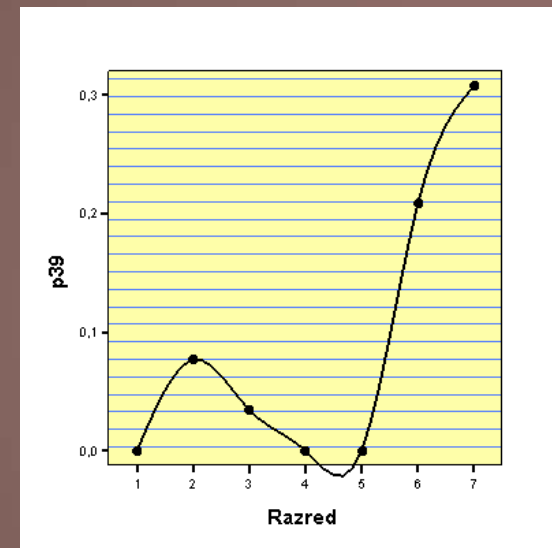
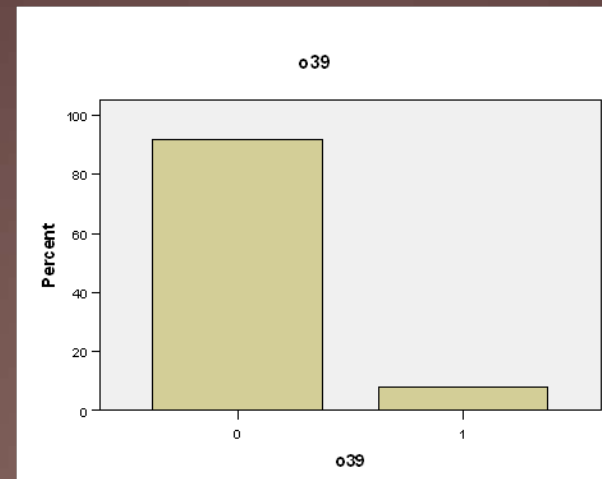
38. Što će pisati u varijabli t nakon izvođenja sljedećega algoritma?

| | |
|--|--------------|
| M | 0.07 |
| SD | 0.248 |
| ID | 0.413 |
| α - zadatak | 0.862 |



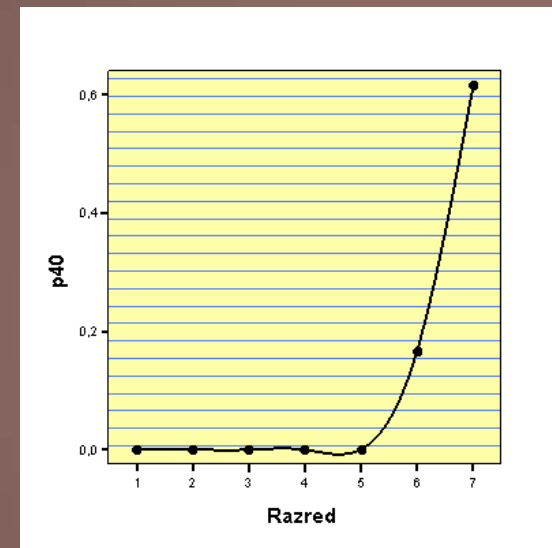
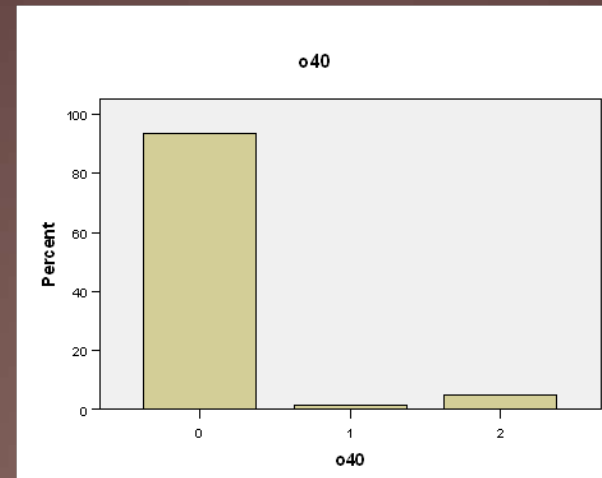
39. Kolika treba biti najmanja pozitivna vrijednost varijable t...?

| | |
|--|--------------|
| M | 0.09 |
| SD | 0.283 |
| ID | 0.350 |
| α - zadatak | 0.862 |



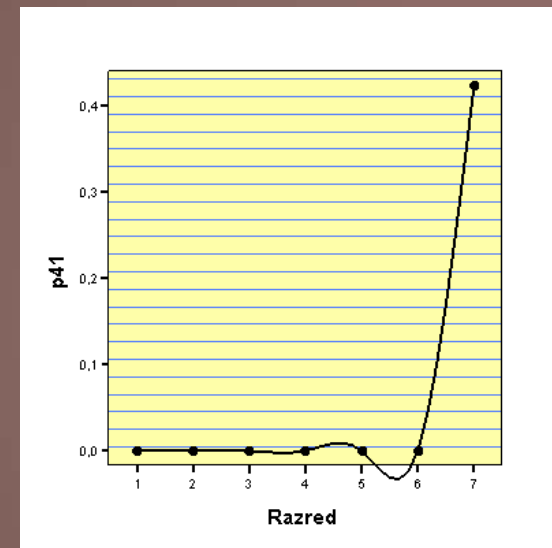
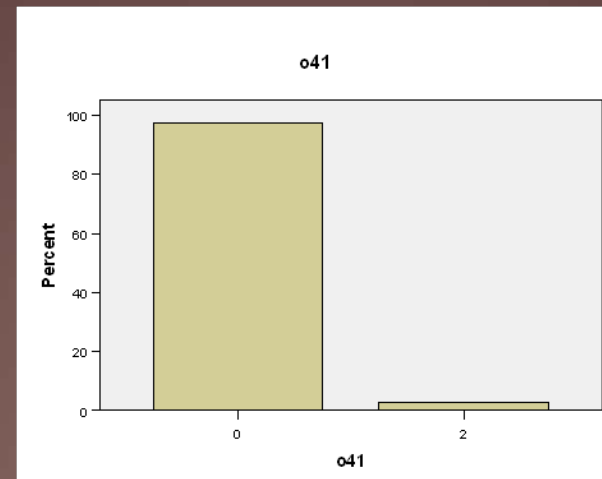
40. Definiran je potprogram pitanje s dvama cjelobrojnim parametrima...

| | |
|--|--------------|
| M | 0.11 |
| SD | 0.442 |
| ID | 0.473 |
| α - zadatak | 0.859 |



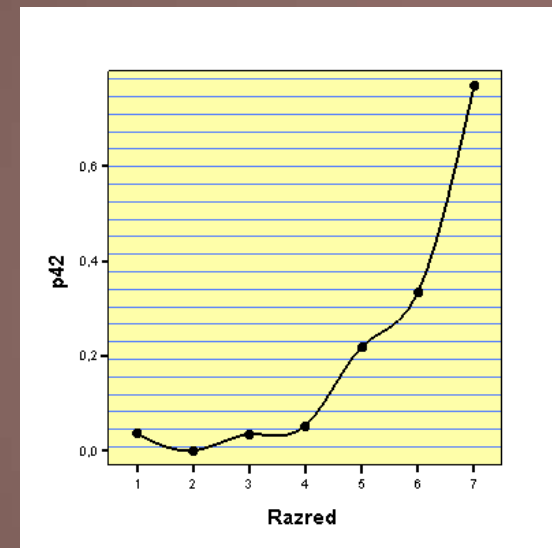
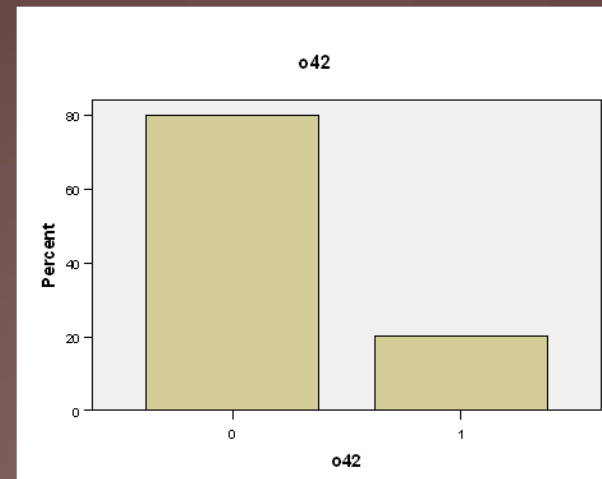
41. Odredite koje će vrijednosti imati varijable cjelobrojnoga niza a od 5 elemenata...

| | |
|--|--------------|
| M | 0.06 |
| SD | 0.333 |
| ID | 0.435 |
| α - zadatak | 0.861 |



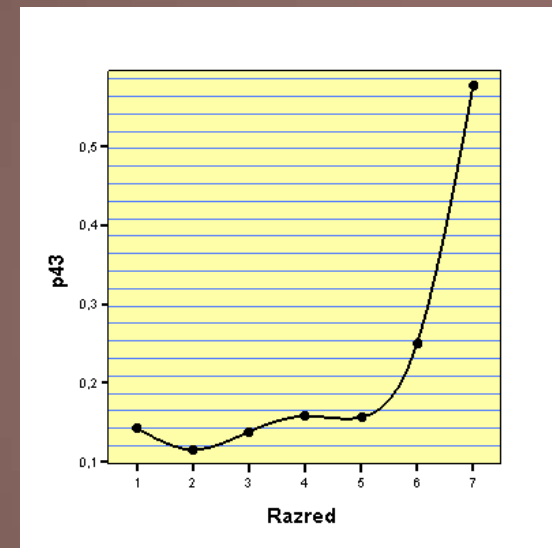
42. Definiran je niz cijelih brojeva a od 10 elemenata...

| | |
|--|--------------|
| M | 0.21 |
| SD | 0.406 |
| ID | 0.556 |
| α - zadatak | 0.858 |



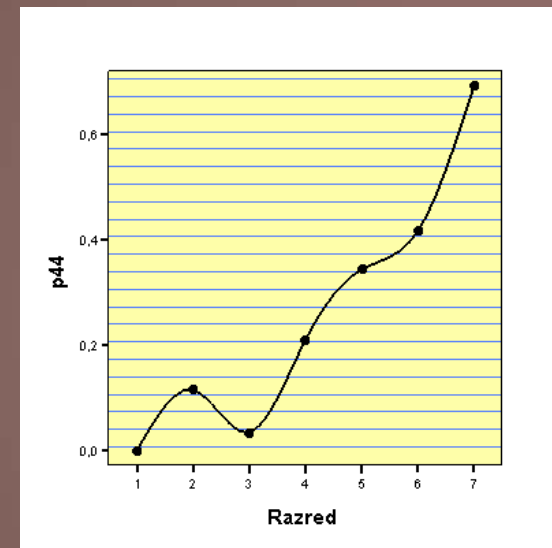
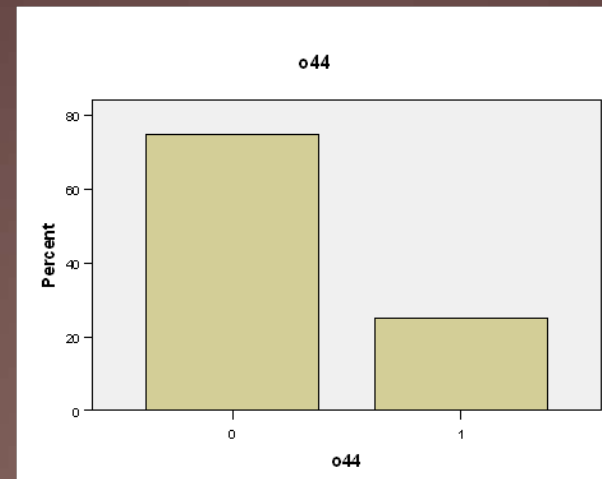
43. U nizu se nalaze sljedeći brojevi...

| | |
|--|--------------|
| M | 0.22 |
| SD | 0.414 |
| ID | 0.268 |
| α - zadatak | 0.863 |



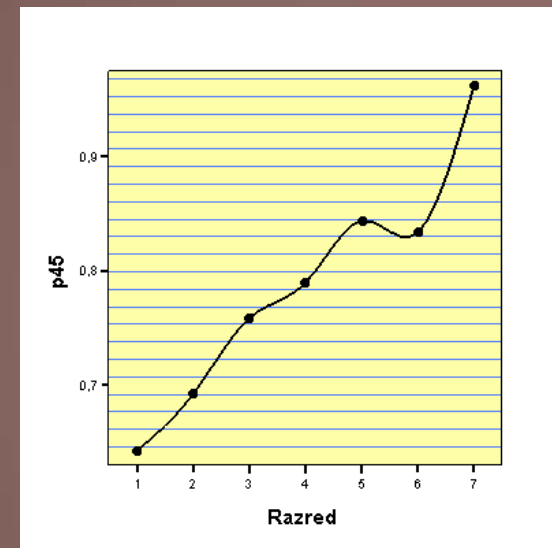
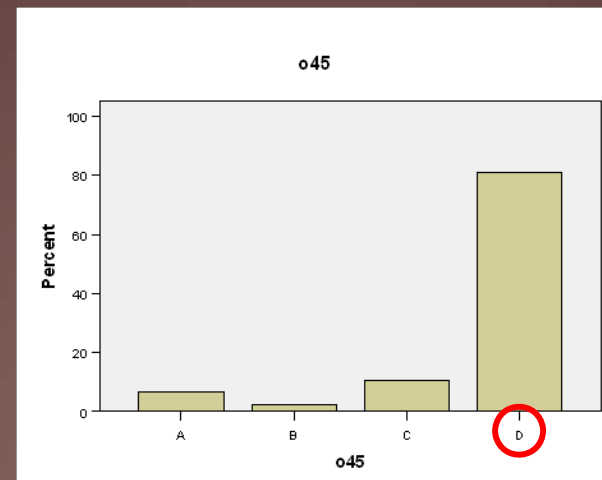
44. Zadan je dvodimenzionalni niz a (matrica) dimenzija 3 x 4...

| | |
|--|--------------|
| M | 0.26 |
| SD | 0.437 |
| ID | 0.470 |
| α - zadatak | 0.859 |



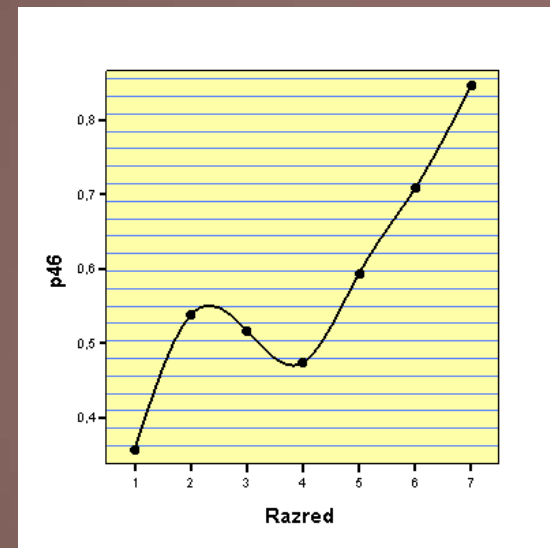
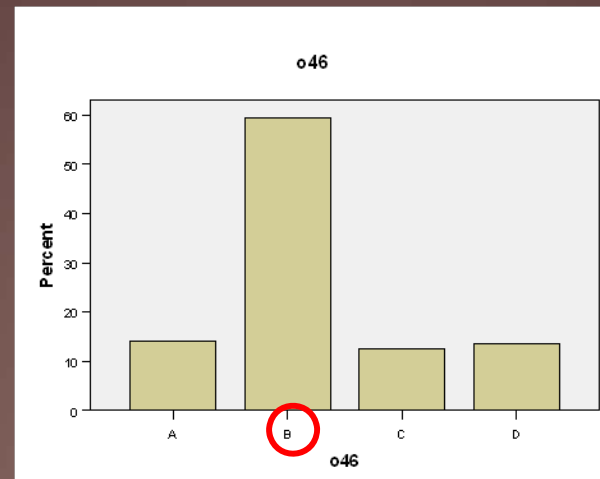
45. Ukoliko imamo datoteku organiziranu sljedno (sekvencijski) i želimo upisati novi podatak...

| | |
|--|--------------|
| M | 0.79 |
| SD | 0.410 |
| ID | 0.195 |
| α - zadatak | 0.864 |



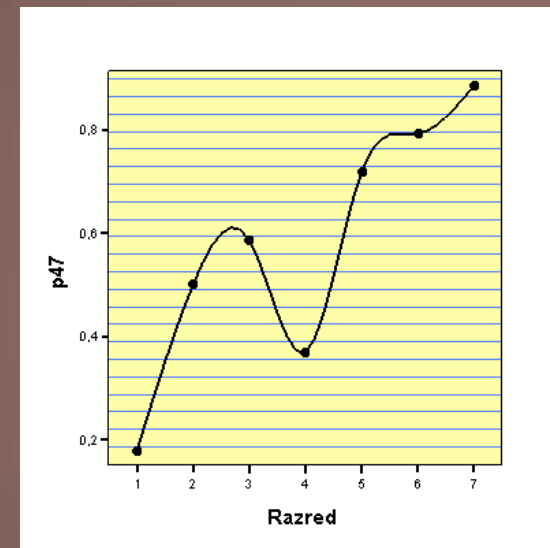
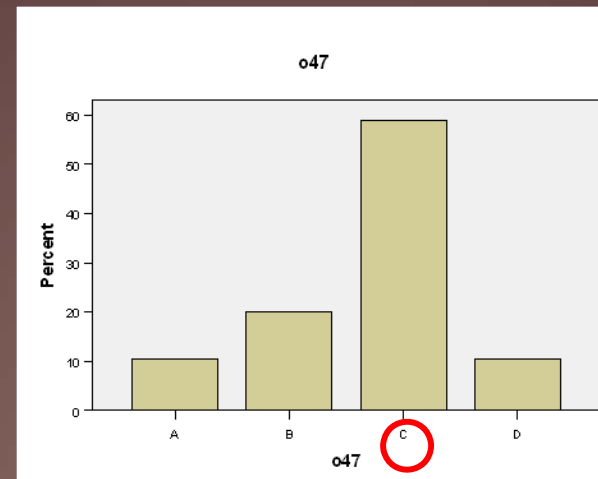
46. Imamo dvije datoteke s istim tipom elemenata sortirane po odabranome ključu...

| | |
|--|--------------|
| M | 0.58 |
| SD | 0.496 |
| ID | 0.211 |
| α - zadatak | 0.864 |



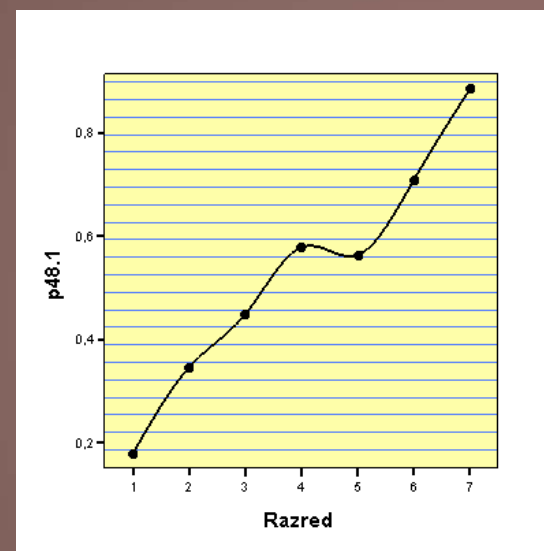
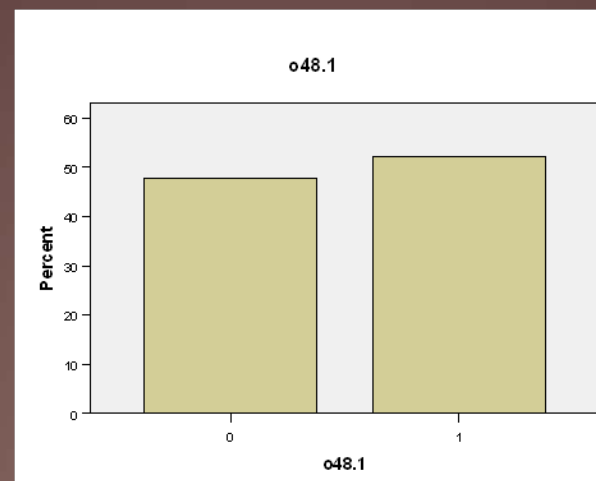
47. Definirana je cjelobrojna funkcija g s dvama cjelobrojnim parametrima x i y ...

| | |
|--|--------------|
| M | 0.58 |
| SD | 0.495 |
| ID | 0.365 |
| α - zadatak | 0.861 |



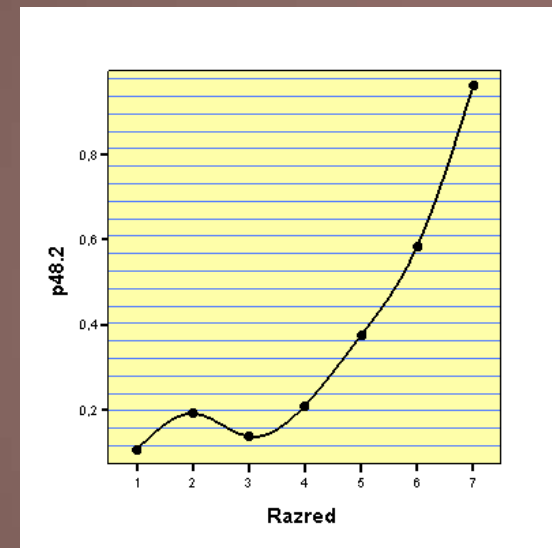
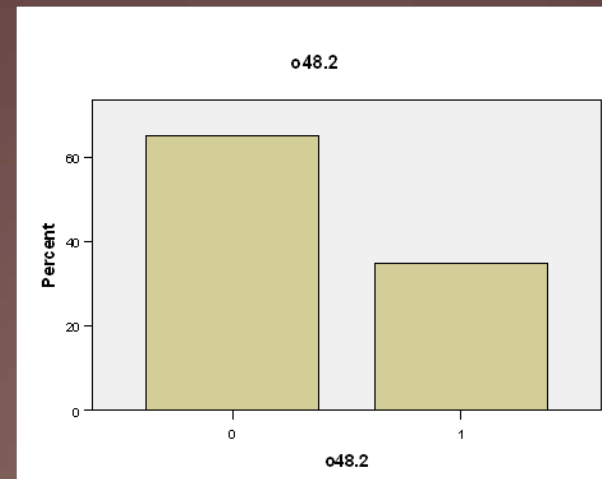
48.1. Koliko argumenata ima funkcija p_j ?

| | |
|--|--------------|
| M | 0.52 |
| SD | 0.501 |
| ID | 0.386 |
| α - zadatak | 0.861 |



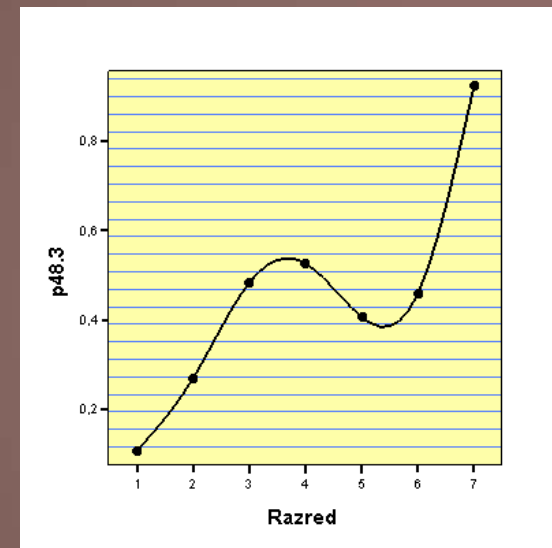
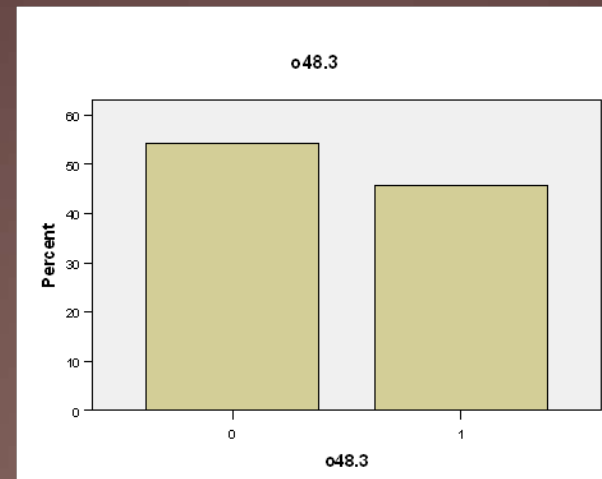
48.2. Što će se ispisati nakon izvođenja programskoga odsječka ako niz p sadrži sljedeće elemente...

| | |
|--|--------------|
| M | 0.36 |
| SD | 0.483 |
| ID | 0.503 |
| α - zadatak | 0.858 |



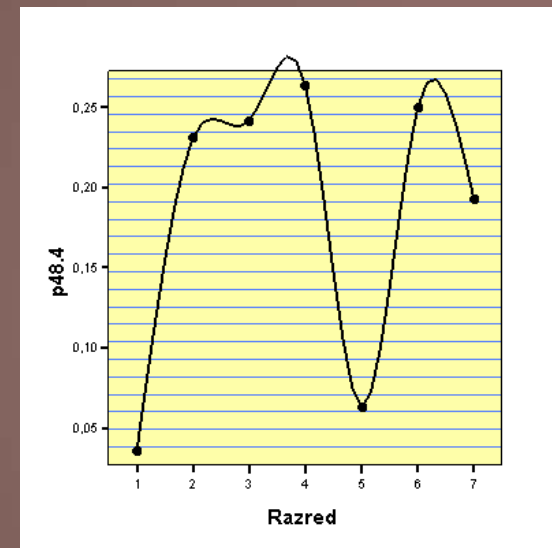
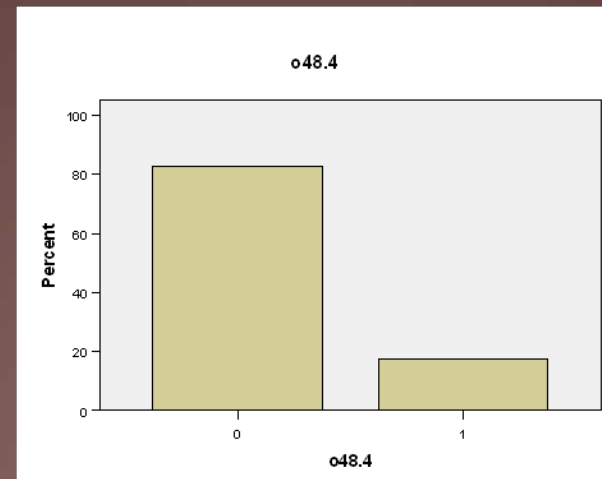
48.3. Što će se ispisati nakon izvođenja programskoga odsječka ako niz p sadrži elemente...

| | |
|--|--------------|
| M | 0.45 |
| SD | 0.498 |
| ID | 0.375 |
| α - zadatak | 0.861 |



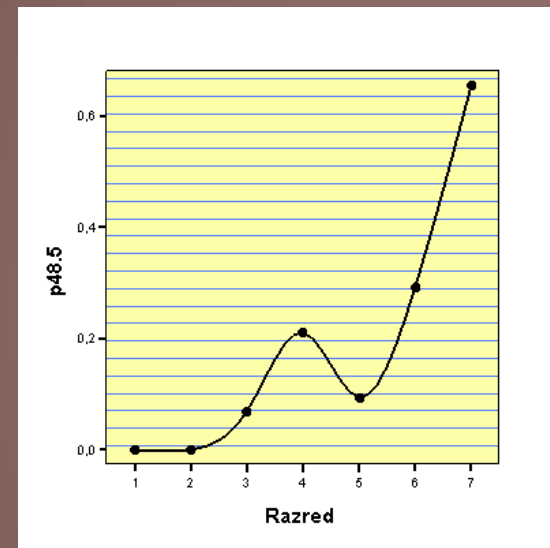
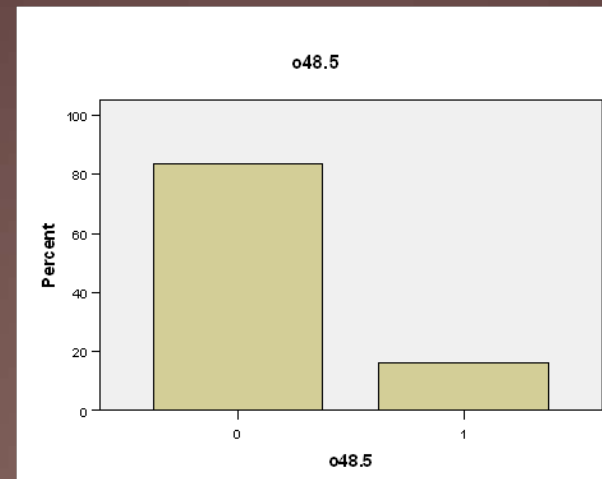
48.4. Koliko će se puta izvesti naredba ponavljanja za sadržaj niza p...

| | |
|--|---------------|
| M | 0.17 |
| SD | 0.380 |
| ID | -0.022 |
| α - zadatak | 0.867 |



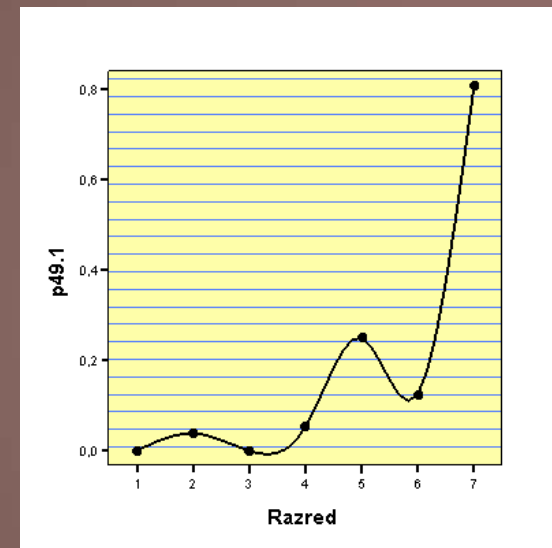
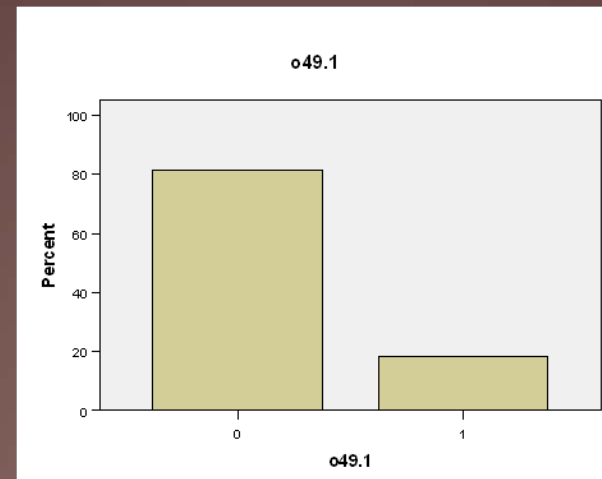
48.5. Napisana funkcija provjerava zadovoljava li upisan niz znakova uvjete zagonetke koja se naziva...

| | |
|--|--------------|
| M | 0.18 |
| SD | 0.385 |
| ID | 0.510 |
| α - zadatak | 0.859 |



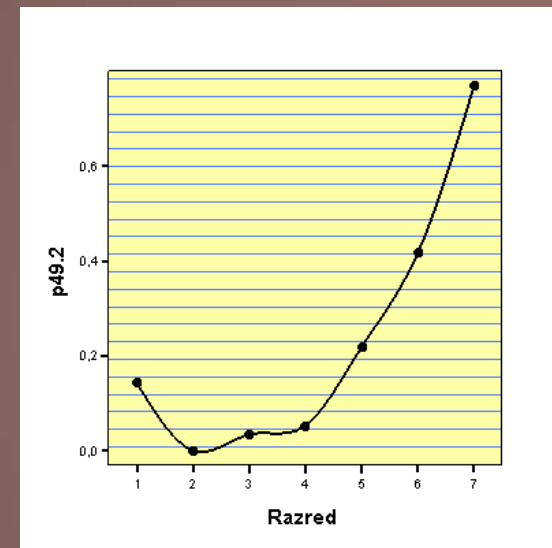
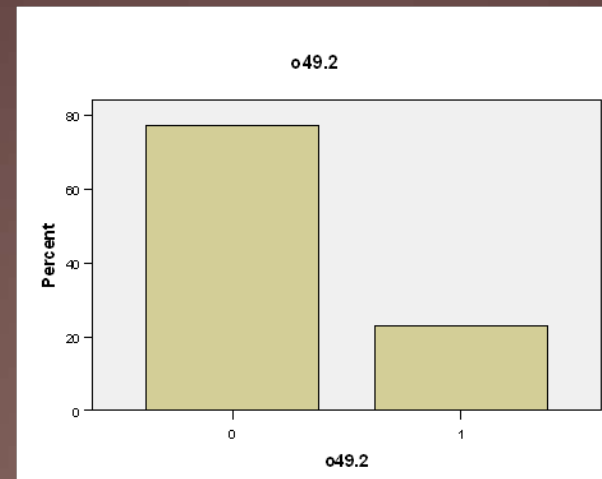
49.1. Napišite funkcijski potprogram...

| | |
|--|--------------|
| M | 0.18 |
| SD | 0.389 |
| ID | 0.557 |
| α - zadatak | 0.858 |



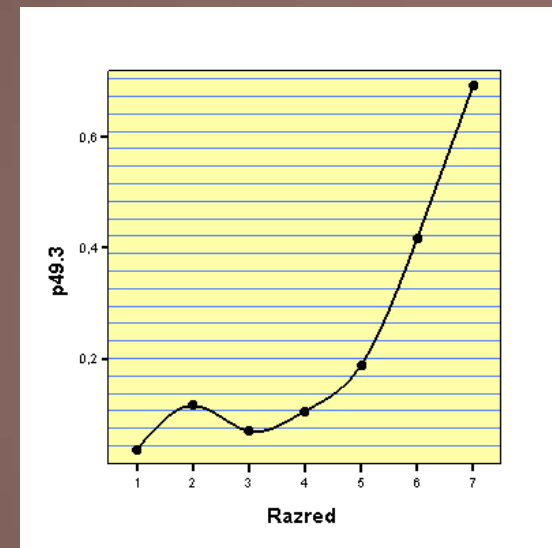
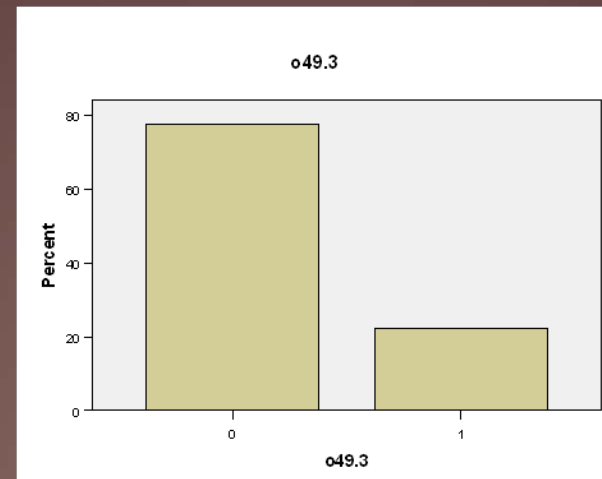
49.2. Koju će vrijednost poprimiti funkcija za početnu vrijednost $x = 8$?

| | |
|--|--------------|
| M | 0.23 |
| SD | 0.424 |
| ID | 0.500 |
| α - zadatak | 0.859 |



49.3. Koliko se puta funkcija poziva uz vrijednost $x = 6$?

| | |
|--|--------------|
| M | 0.23 |
| SD | 0.421 |
| ID | 0.446 |
| α - zadatak | 0.860 |



50. Definirana je cjelobrojna rekurzivna funkcija f s jednim cjelobrojnim parametrom n .

| | |
|--|--------------|
| M | 0.26 |
| SD | 0.437 |
| ID | 0.501 |
| α - zadatak | 0.859 |

