

Imamo seznam $N = 400$ števil:

```
[17.42, 28.89, 36.51, 37.25, 79.14, 33.25, 23.89, 85.39,
12.45, 31.68,
65.9, 22.07, 21.04, 7.744, 11.12, 84.99, 43.09, 88.6, 70.49, 27.94, 4
7.76, 82.38, 51.06, 67.29, 2.73, 51.8, 34.45, 21.25, 17.78, 78.81, 64
03.88, 04.34, 74.19, 92.35, 91.60, 48.40, 67.68, 45.65, 64.92, 21.5
9.26, 60.3, 41.12, 20.7, 1.407, 5.396, 53.23, 61.11, 44.73, 43.33, 0
1125, 65.4, 36.01, 12.63, 83.69, 29.88, 9.944, 54.45, 37.46, 18.83, 6
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91.11, 16.11, 38.58, 85.17, 33.08, 77.84, 62.58, 19.47, 49.96, 11.22
4.613, 30.21, 8.412, 18.79, 87.13, 50.47, 44.39, 19.44, 96.16, 51,
92.51, 13.97, 21.57, 0.03851, 79.79, 65.1, 67.29, 28.73, 4.529, 57.9
5, 81.41, 85.16, 79.28, 95.39, 39.72, 15.86, 62.45, 79.89, 76.48, 47,
01.14, 73.92, 24.6, 961, 9.686, 70.5, 18.52, 76.49, 75.96, 32.5, 83.0
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6, 52.11, 15.39, 9.581, 30.26, 52.11, 57.07, 64.54, 13.47, 54.11, 2.7
94, 9.945, 53.04, 24.38, 86.66, 34.27, 47.12, 1.472, 13.18, 27.6, 63,
48, 63.38, 55.84, 68.49, 63.8, 12.19, 80.02, 99.2, 77.82, 21.25, 10.8
5, 77.43, 14.98, 44.38, 90.98, 88.45, 17.35, 22.95, 97.07, 94.21, 15,
07.4, 386, 37.91, 6.348, 36.21, 66.44, 49.95, 5.247, 47.55, 17.29, 39
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54, 41.49, 62.81, 0.5084, 53.07, 5.351, 85.69, 34.12, 70.79, 0.2959
46, 04.36, 12.48, 63, 2.03, 45.55, 27.43, 32.13, 97.64, 40.68, 69, 16
50, 94.60, 42.14, 08, 18.23, 27.12, 13.89, 45.89, 28.55, 4.511, 4.36
8, 36.24, 24.35, 68.55, 36.32, 70.25, 41.64, 46.16, 11.73, 54.6, 93.7
7, 98.05, 37.04, 1.904, 48.54, 37.59, 80.07, 92.89, 32.83, 31.66, 65,
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26, 39.99, 6.244, 96.46, 13.7, 64.4, 77.67, 18.48, 19.62, 98.59, 5.90
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13, 87.07, 99.2, 27.8, 75.79, 43.9, 18.52, 50.97, 11.22, 29.05, 69.0
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9.11, 61.69, 84.12, 45, 86.71, 93.47, 2.606, 0.2748, 71.84, 7.746, 9
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46, 42.73, 55.95, 67.42, 76.58, 51.78, 79.6, 49.44, 68.74, 91.99, 30
49]
```

Izračunamo aritmetično sredino in standardno deviacijo:

$$\mu = 45.74 \quad \sigma = 28.09$$

Imamo seznam $N = 400$ števil:

```
[17.42, 28.89, 36.51, 37.25, 79.14, 33.25, 23.89, 85.39,
12.45, 31.68,
65.9, 22.07, 21.04, 7.744, 11.12, 84.99, 43.09, 88.6, 70.49, 27.94, 4
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03.88, 04.34, 74.19, 92.35, 91.60, 48.40, 67.68, 45.45, 64.92, 21.5
9.26, 60.3, 41.12, 20.7, 1.407, 5.396, 53.23, 61.11, 44.73, 43.33, 0
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9.07, 37.58, 52.11, 35.19, 55.44, 61.98, 80.97, 29.42, 65.87, 63.33,
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4.611, 30.21, 8.412, 18.79, 87.13, 50.47, 44.39, 19.44, 96.16, 51,
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46, 42.73, 55.95, 67.42, 76.58, 51.78, 79.6, 49.44, 68.74, 91.99, 30
49]
```

Izračunamo aritmetično sredino in standardno deviacijo:

$$\mu = 45.74 \quad \sigma = 28.09$$

Vseh vzorcev velikosti $n = 25$ je

$$\binom{400}{25} = 3374984143967003227518313193523922790016$$

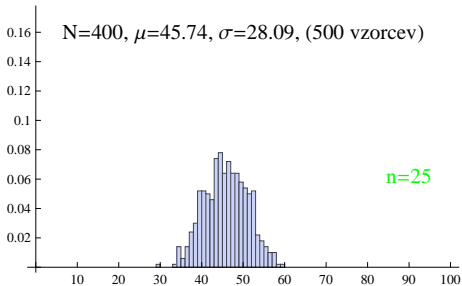
Računalniku ukažemo, naj naključno izbere 500 vzorcev iz za vsakega izmed njih naj izračuna aritmetično sredino posameznega vzorca. Tako dobimo 500 aritmetičnih sredin.

Vseh vzorcev velikosti $n = 25$ je

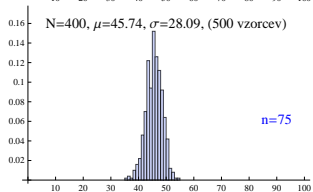
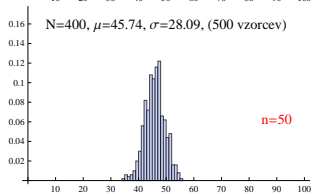
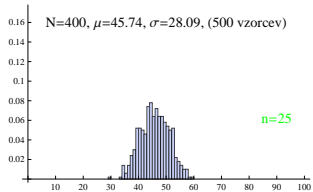
$$\binom{400}{25} = 3374984143967003227518313193523922790016$$

Računalniku ukažemo, naj naključno izbere 500 vzorcev iz za vsakega izmed njih naj izračuna aritmetično sredino posameznega vzorca. Tako dobimo 500 aritmetičnih sredin.

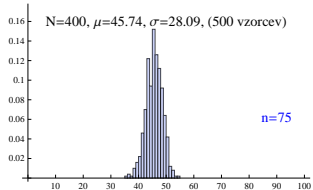
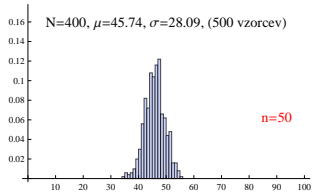
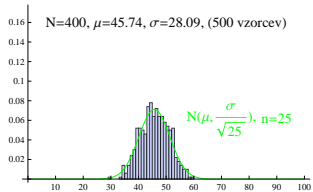
Prikaz aritmetičnih sredin s histogramom (na y-osi je prikazan delež; vsi razredi so enake dolžine (=1))



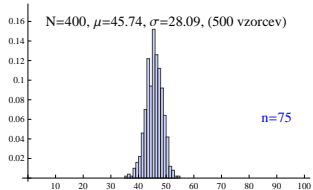
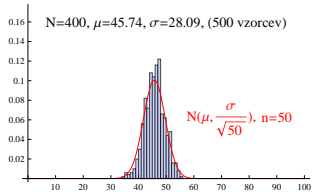
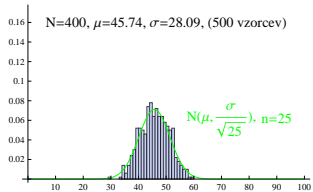
Eksperiment ponovimo za večje vzorce: $n = 50$, $n = 75$



Eksperiment ponovimo za večje vzorce: $n = 50$, $n = 75$



Eksperiment ponovimo za večje vzorce: $n = 50$, $n = 75$



Eksperiment ponovimo za večje vzorce: $n = 50$, $n = 75$

