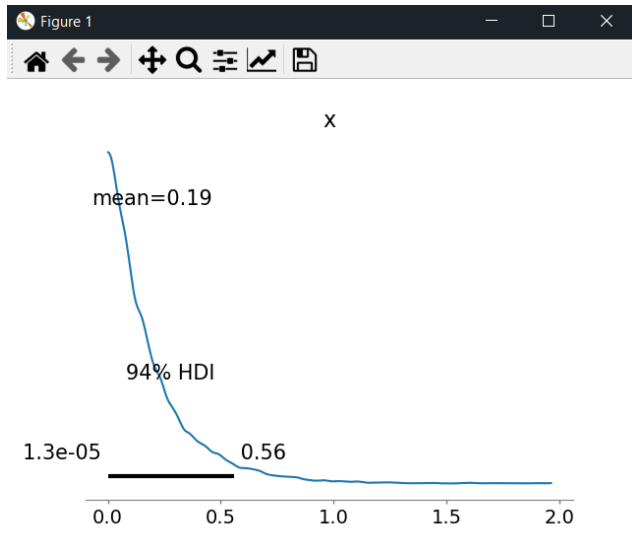


EX1.



```
ex1.py > ...
1  import numpy as np
2  from scipy import stats
3  from scipy.stats import expon
4  import matplotlib.pyplot as plt
5  import matplotlib.pyplot as plt
6  import arviz as az
7  import random
8  import statistics
9  #x = stats.expon.rvs(0, 1, 10000)
10 #lambda1=4 hrs^-1 => p1=1/4=0.25
11 p_lambda_1 = 0.25
12
13 #lambda2=6 hrs^-1 => p2=1/6=0.16
14 p_lambda_2 = 0.16
15
16 X = []
17
18 #generati 10.000 de valori pentru X
19 for n in range(1, 10_000):
20     x = random.randint(1, 100)
21     if x < 40:
22         # mecanicul 1
23         x_mecanic1 = stats.expon.rvs(0, p_lambda_1, 1)
```

PROBLEMS 6 OUTPUT TERMINAL JUPYTER SQL CONSOLE DEBUG CONSOLE

Windows PowerShell
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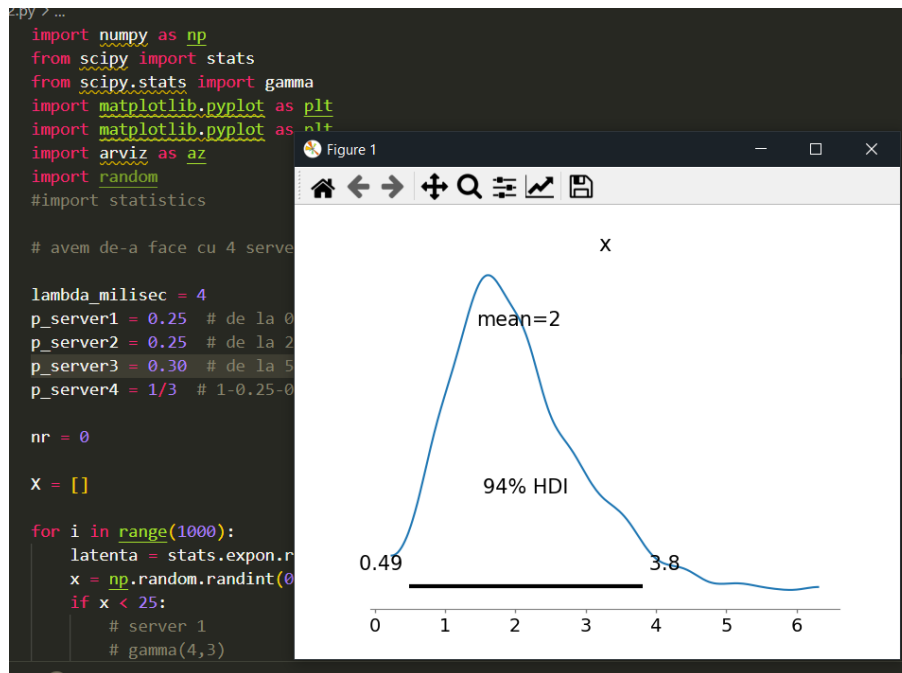
Try the new cross-platform PowerShell <https://aka.ms/pscore6>

PS C:\Users\emili\OneDrive\Desktop\AN_3\PMP\Lab2> python -u "c:\Users\emili\OneDrive\Desktop\AN_3\PMP\Lab2\ex1.py"
0.19416341651050892
0.20305207989914806
PS C:\Users\emili\OneDrive\Desktop\AN_3\PMP\Lab2>

EX2.

Pentru 1000 clienti:

Nu mai avem nevoie de distributia exponentiala, ci o folosim pe cea Gamma.



```
Execution result - Qiskit X

0.157
C:\Users\emili\anaconda3\lib\site-packages\arviz\data\base.py:220: UserWarning: M
warnings.warn(
```

EX3.

