Write-up

Name: Nama Sai Krishna Prateek UTA ID: 1001880903

Program: dist.py

Language: Python version 3.9

Libraries: 'Random' only

Steps to execute the program:

1. Open the terminal and go to the path where the file is located.
2. Execute the file 'dist.py' through python3.

```
Python3 dist.py
```

3. The command line input should be given in a single string format with comma "," considering as separation of input and in the end for parameters.

```
3,10,binomial,10,0.5
```

4. The Sample numbers are printed on terminal and a file result.txt is also generated in the same path of the python program file which include sample numbers, Sample mean and Sample standard deviation.

For references:

- `1,200 – for problem 5.1`
- `2,500 – for problem 5.6`
- `3,10,bernoulli,0.5 – Bernoulli distribution`
- `3,10,binomial,10,0.6 – Binomial distribution`
- `3,15,geometric,0.8 – Geometric distribution`
- `3,20,negative binomial,3,0.6 – Negative binomial`
- `3,10,poisson,4 – Poisson distribution`
- `3,15,arb,0.6,0.4,0.7(so on) – Arbitrary discrete`
- `3,20,uniform,1,10 - uniform distribution`
- `3,10,exponential,5 – exponential distribution`
- `3,15,gamma,0.75,1.5 – Gamma distribution`
- `3,20,normal,3.0,5.0 – Normal distribution`