

Assignment_02_Completed

July 19, 2020

1 Assignment 02: Perform CDF and PDF

The comments/sections provided are your cues to perform the assignment. You don't need to limit yourself to the number of rows/cells provided. You can add additional rows in each section to add more lines of code.

If at any point in time you need help on solving this assignment, view our demo video to understand the different steps of the code.

Happy coding!

1: Import required library

```
[2]: from scipy.stats import norm
```

2: Perform Cumulative Distribution Function or CDF on variables, with loc 1 and scale 3

Use SciPy to declare 20 random values for random values and perform the following:

1. CDF – Cumulative Distribution Function for 10 random variables.

2. PDF – Probability Density Function for 14 random variables.

```
[18]: norm.rvs(loc = 1, scale= 3, size = 20)
```

```
[18]: array([ 4.8734091 ,  1.09081516, -0.47609774, -0.84821644,  2.84502031,
          2.69338602,  3.71063594, -4.35569015,  3.28790041, -2.81003634,
          5.71474654,  5.06181467, -0.55792114,  0.99447561,  4.28046076,
          1.93418292, -4.3731878 ,  3.12944552,  0.37966409, -4.73434681])
```

3: Perform Probability Density Function or PDF on variables, with loc 1 and scale 1

```
[21]: norm.cdf(10 ,loc =1, scale =3)
```

[21]: 0.9986501019683699

[20]: `norm.pdf(14, loc =1, scale =1)`

[20]: 7.998827757006813e-38