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

In [1]:

```
#import library for normal distribution
from scipy.stats import norm
```

In [6]:

```
#define 20 random variables for normal distribution of data
norm.rvs(loc=0,scale=1,size=20)
```

Out[6]:

```
array([-0.33310371,  0.54183266,  0.66541331, -0.56967958,  0.30157522,
       -0.3694248 ,  0.98105866, -0.36724454, -0.96792396,  2.66308772,
        0.85152618, -0.38279241, -1.16223225,  0.04803497, -1.65336957,
       -0.455934  ,  1.55193688, -0.39621003, -0.13161454, -1.78446914])
```

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

In [7]:

```
#perform cumulative Distribution Function or CDF on variable 10 and loc 1 and scale 3
norm.cdf(10,loc=1,scale=3)
```

Out[7]:

```
0.9986501019683699
```

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

In [8]:

```
#perform probability Density Function or PDF on variable =14 and loc=1 and scale=1
norm.pdf(14,loc=1,scale=1)
```

Out[8]:

```
7.998827757006813e-38
```

In [9]:

```
print("the pdf and cdf values are calculated")
```

```
the pdf and cdf values are calculated
```

In [10]:

```
print("Successfully completed the project on CDF and PDF using Scipy")
```

Successfully completed the project on CDF and PDF using Scipy

In [ ]:

```
print("Thank You Simplilearn")
```