Perform CDF and PDF using Scipy

DESCRIPTION

**Problem:**

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

1. CDF – Cumulative Distribution Function for a random variable 10

2. PDF – Probability Density Function for a random variable 14.

**Assessment**:

**1: Import required library**

#importing norm from scipy.stats for normal distribution

>>from scipy.stats import norm

#creating Random Variables

>>norm.rvs(loc=0,scale=1,size=20)

**Output**:

array([-0.89635134, 0.47952348, 1.08893361, 1.51720562, -0.10306936,

0.80409566, 1.38814394, 1.16036486, 0.85383647, -0.27097295,

-0.79994655, -0.41627877, -0.50270829, 0.03863493, 0.1921456 ,

-0.15592108, -0.3622249 , -0.2676438 , 0.78463762, 0.92451046])

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

#Performing CDF for a random value 10, with loc 1 and scale 3

>>norm.cdf(10,loc=1,scale=3)

**Output**:

0.9986501019683699

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

#Performing PDF for a random value 14, with loc 1 and scale 1

>>norm.pdf(14,loc=1,scale=1)

**Output**:

7.998827757006813e-38