Python Projects

On IPE-205

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# Exploratory Data Analysis (EDA)

# Probability Distribution

## Normal Distribution

### Math Problem 1

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| Suppose the lengths of telephone calls form a normal distribution with a mean length of 8.0 min and a standard deviation of 2.5 min. The probability that a telephone call selected at random will last more than 15.5 min is most nearly: | |
| **Python Code:**  import scipy.stats  mean\_normal = 8  standard\_deviation\_normal = 2.5  probability\_norm\_gt = scipy.stats.norm.sf(15.5, mean\_normal,standard\_deviation\_normal)  print(probability\_norm\_gt)  # SF = Survival Function (1-CDF)  **Output:**  0.0013 | **Explanation:**  When ***more than*** condition is involved, we apply survival function, sf, from Scipy package  <https://docs.scipy.org/doc/scipy/reference/generated/scipy.stats.norm.html> |
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| **Python Code:**  **Output:** | **Explanation:** |
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### Poison Distribution

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| **Python Code:**  **Output:** | **Explanation:** |
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### Exponential Distribution

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| **Python Code:**  **Output:** | **Explanation:** |
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### Uniform Distribution

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| **Python Code:**  **Output:** | **Explanation:** |
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# Correlation & Regression

# ANOVA

# Design of Experiment