**IT2120- Probability and Statistics**

**Lab Sheet 06**

**IT24102285 – Athapaththu A.W.W.S**

1. An IT company claims that their newly developed learning platform improves stu dent performance in online tests. According to previous data, 85% of students who used the platform passed their online tests. A batch of 50 students is selected at random who have completed the course using this platform. Let X denote the number of students who passed the test out of 50 students.
2. What is the distribution of X?

A white background with black text

AI-generated content may be incorrect.

1. What is the probability that at least 47 students passed the test?

A math equation with numbers

AI-generated content may be incorrect.

A number of mathematical equations

AI-generated content may be incorrect.

1. A call center receives an average of 12 customer calls per hour.
2. What is the random variable (X) for the problem?

A close up of a word

AI-generated content may be incorrect.

1. What is the distribution of X?



1. What is the probability that exactly 15 calls are received in an hour?

A close up of a text

AI-generated content may be incorrect.

A close up of numbers

AI-generated content may be incorrect.