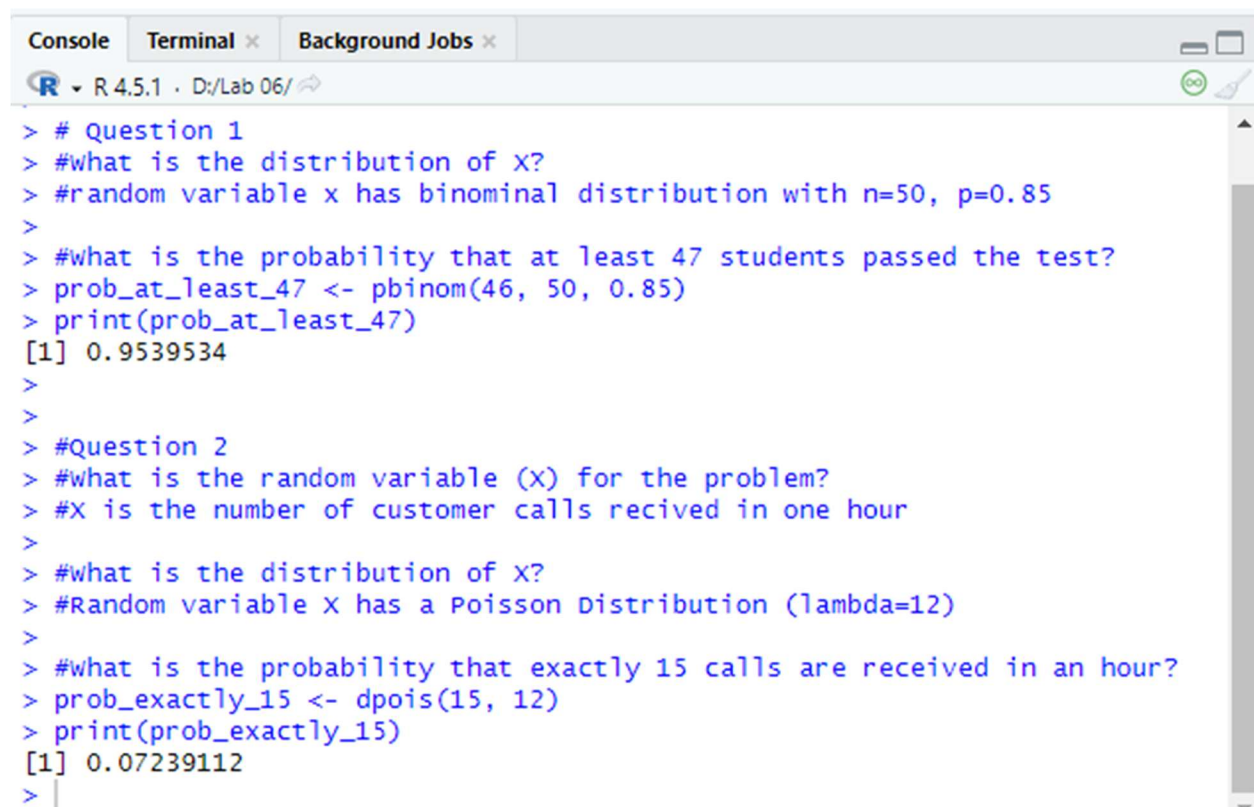IT24101966

```
 1  setwd("D:\\Lab 06")
 2
 3  # Question 1
 4  #what is the distribution of X?
 5  #random variable x has binominal distribution with n=50, p=0.85
 6
 7  #what is the probability that at least 47 students passed the test?
 8  prob_at_least_47 <- pbinom(46, 50, 0.85)
 9  print(prob_at_least_47)
10
11
12  #Question 2
13  #What is the random variable (X) for the problem?
14  #X is the number of customer calls recived in one hour
15
16  #what is the distribution of X?
17  #Random variable X has a Poisson Distribution (lambda=12)
18
19  #what is the probability that exactly 15 calls are received in an hour?
20  prob_exactly_15 <- dpois(15, 12)
21  print(prob_exactly_15)
```

Console **Terminal** × **Background Jobs** ×

R ▾ R 4.5.1 · D:/Lab 06/

```
> # Question 1
> #what is the distribution of X?
> #random variable x has binominal distribution with n=50, p=0.85
>
> #what is the probability that at least 47 students passed the test?
> prob_at_least_47 <- pbinom(46, 50, 0.85)
> print(prob_at_least_47)
[1] 0.9539534
>
>
> #Question 2
> #what is the random variable (X) for the problem?
> #X is the number of customer calls recived in one hour
>
> #what is the distribution of X?
> #Random variable X has a Poisson Distribution (lambda=12)
>
> #what is the probability that exactly 15 calls are received in an hour?
> prob_exactly_15 <- dpois(15, 12)
> print(prob_exactly_15)
[1] 0.07239112
>
```