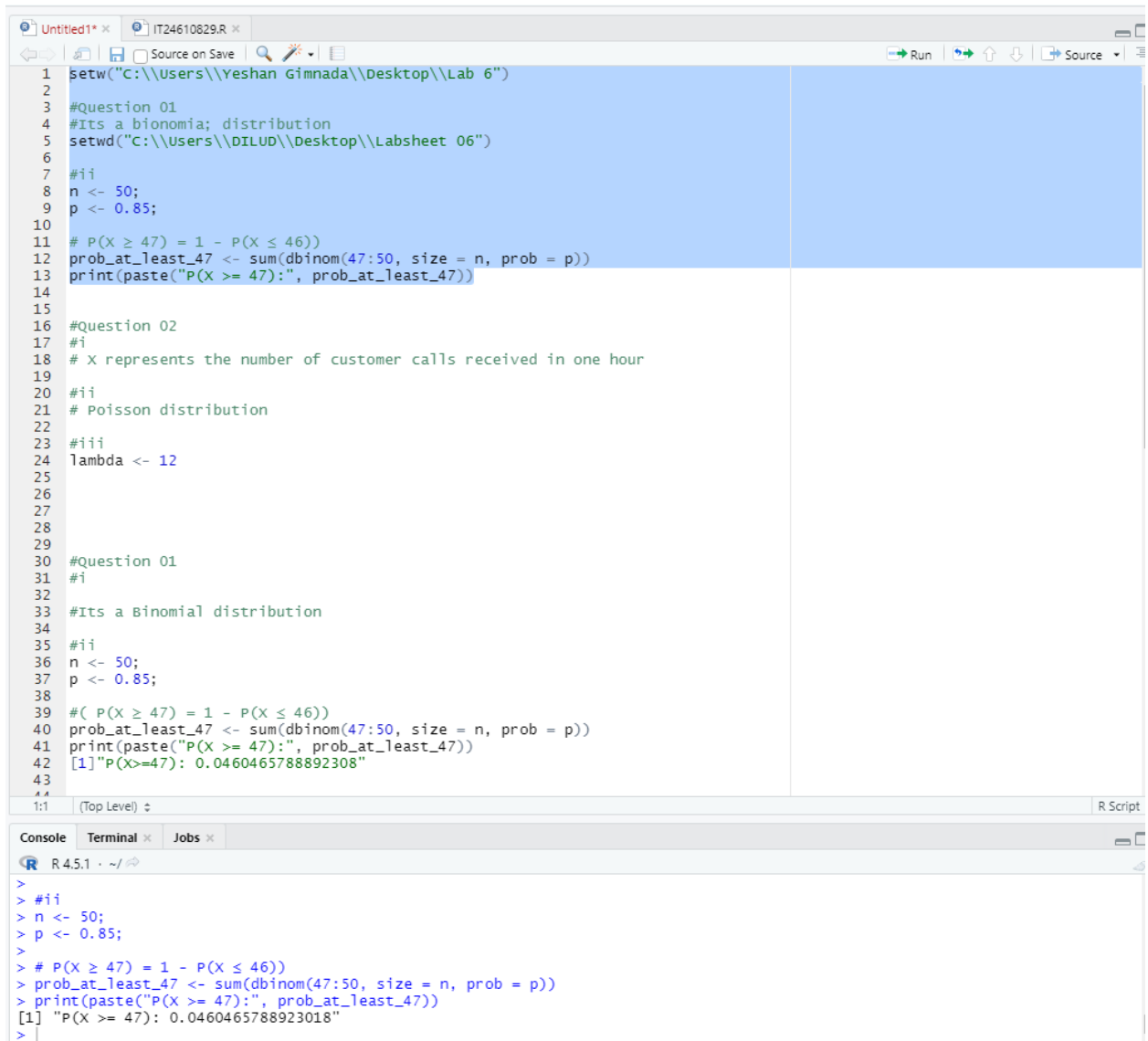


Kuruneru Y.G

Lab sheet 06



```
1 setwd("C:\\Users\\Yeshan Gimnada\\Desktop\\Lab 6")
2
3 #Question 01
4 #Its a binomial distribution
5 setwd("C:\\Users\\DILUB\\Desktop\\Labsheet 06")
6
7 #ii
8 n <- 50;
9 p <- 0.85;
10
11 # P(X ≥ 47) = 1 - P(X ≤ 46)
12 prob_at_least_47 <- sum(dbinom(47:50, size = n, prob = p))
13 print(paste("P(X ≥ 47):", prob_at_least_47))
14
15
16 #Question 02
17 #i
18 # x represents the number of customer calls received in one hour
19
20 #ii
21 # Poisson distribution
22
23 #iii
24 lambda <- 12
25
26
27
28
29
30 #Question 01
31 #i
32
33 #Its a Binomial distribution
34
35 #ii
36 n <- 50;
37 p <- 0.85;
38
39 # P(X ≥ 47) = 1 - P(X ≤ 46)
40 prob_at_least_47 <- sum(dbinom(47:50, size = n, prob = p))
41 print(paste("P(X ≥ 47):", prob_at_least_47))
42 [1] "P(X ≥ 47): 0.0460465788892308"
43
44
```

```
>
> #ii
> n <- 50;
> p <- 0.85;
>
> # P(X ≥ 47) = 1 - P(X ≤ 46)
> prob_at_least_47 <- sum(dbinom(47:50, size = n, prob = p))
> print(paste("P(X ≥ 47):", prob_at_least_47))
[1] "P(X ≥ 47): 0.0460465788892308"
>
```

```
IT24610829.R x
Source on Save
Run
31
32
33 #Question 02
34 #i
35 # X represents the number of customer calls received in one hour
36
37 #ii
38 # Poisson distribution
39
40 #iii
41 lambda <- 12
42 # P(X = 15)
43 prob_15_calls <- dpois(15, lambda = lambda)
44 print(paste("P(X = 15):", prob_15_calls))
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75:1 (Top Level) R Script
Console Terminal Jobs
R 4.5.1 ~
> # Poisson distribution
>
> #iii
> lambda <- 12
> # P(X = 15)
> prob_15_calls <- dpois(15, lambda = lambda)
> print(paste("P(X = 15):", prob_15_calls))
[1] "P(X = 15): 0.0723911201466387"
>
```