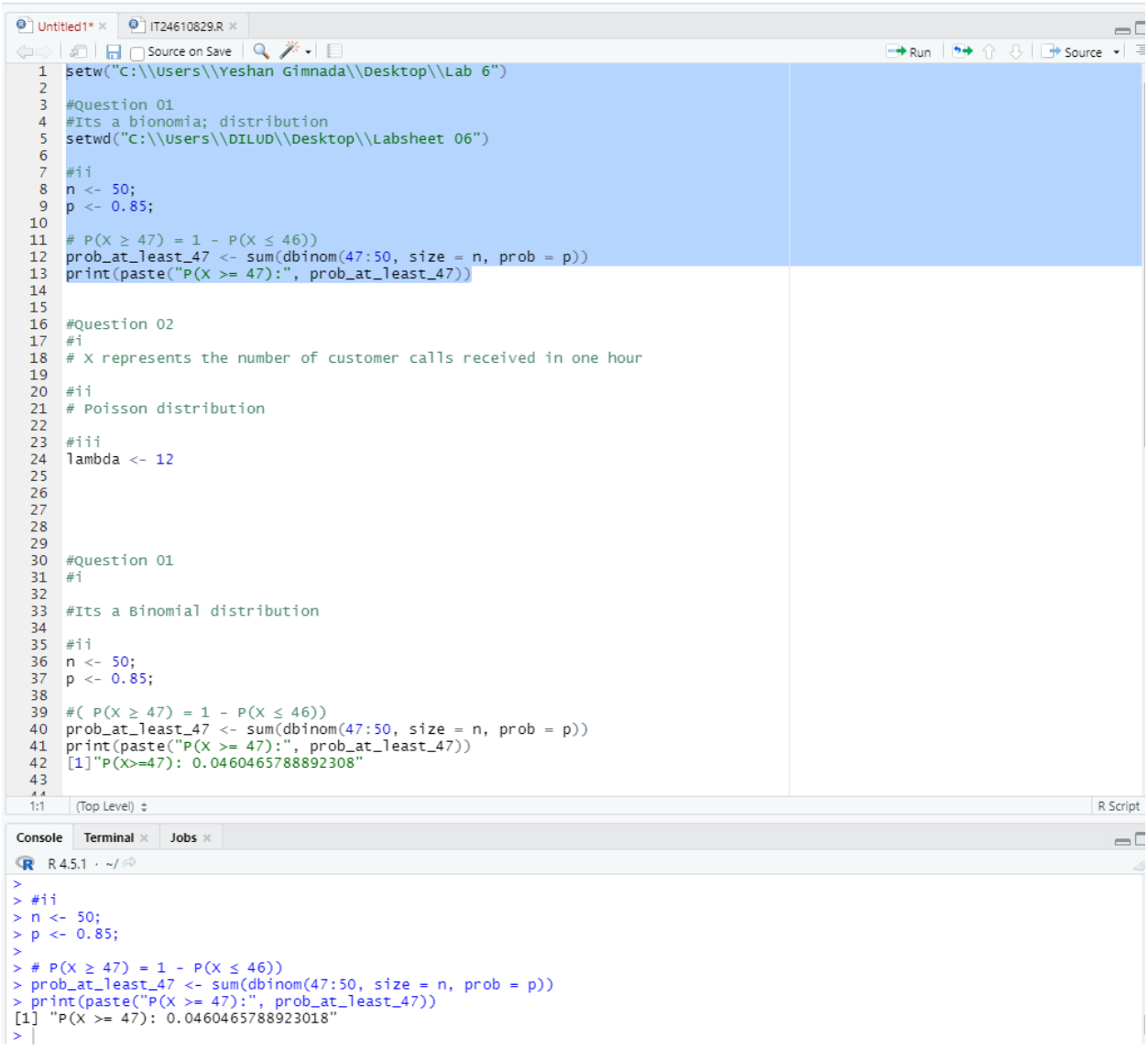
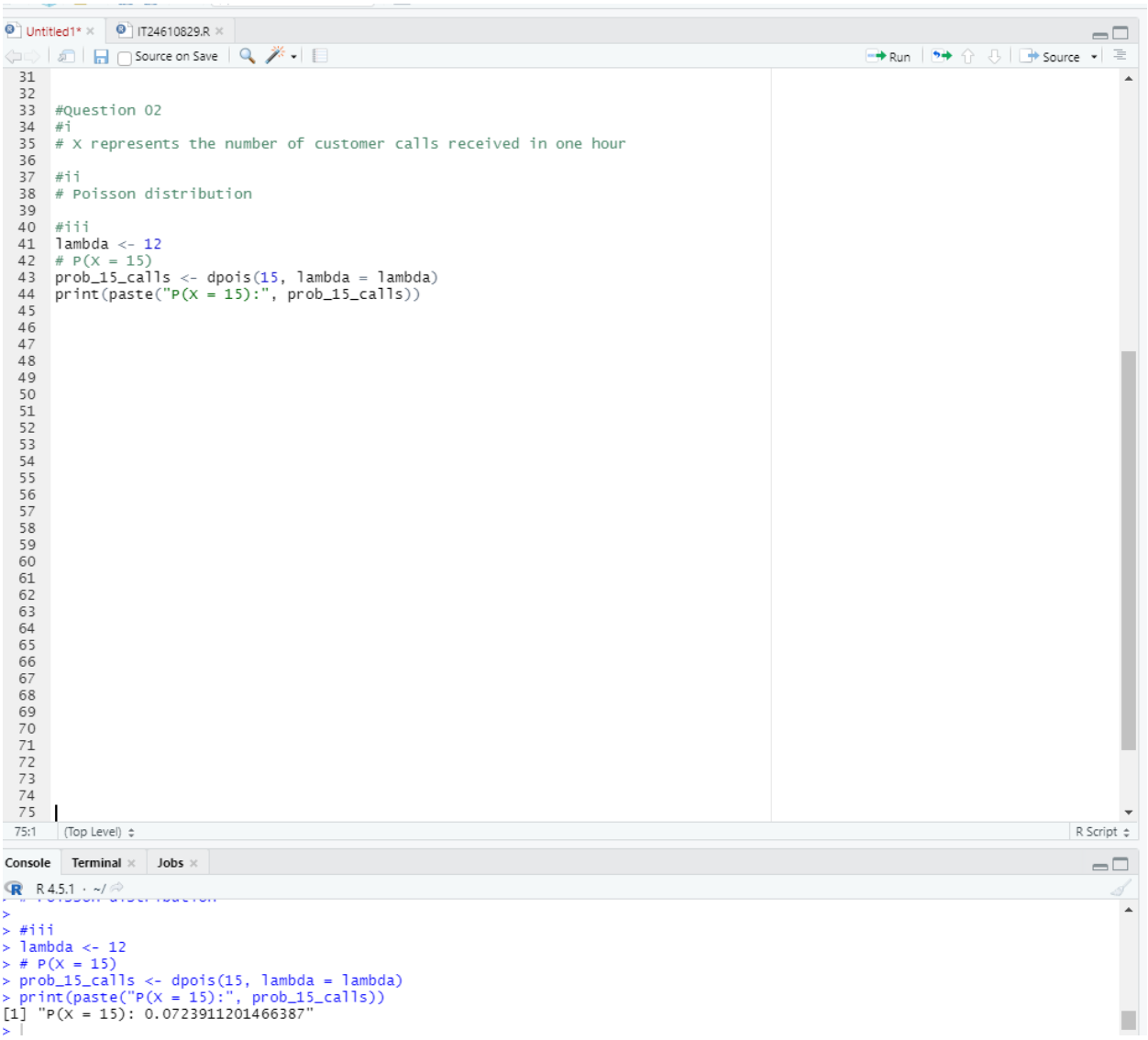
Kuruneru Y.G

Lab sheet 06



```
setw("C:\\Users\\Yeshan Gimnada\\Desktop\\Lab 6")

#Question 01
#Its a bionomia; distribution
setwd("C:\\Users\\DILUD\\Desktop\\Labsheet 06")

#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))


#Question 02
#i
# X represents the number of customer calls received in one hour

#ii
# Poisson distribution

#iii
lambda <- 12




#Question 01
#i

#Its a Binomial distribution

#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"
```

```
> 
> #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): 0.0460465788923018"
> 
```


Untitled1*
IT24610829.R
Source on Save
Run
Source
#Question 02
#i
X represents the number of customer calls received in one hour
#ii
Poisson distribution
#iii
lambda <- 12
# P(X = 15)
prob_15_calls <- dpois(15, lambda = lambda)
print(paste("P(X = 15):", prob_15_calls))
75:1
(Top Level)
R Script
Console
Terminal
Jobs
R 4.5.1 · ~/
> #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"