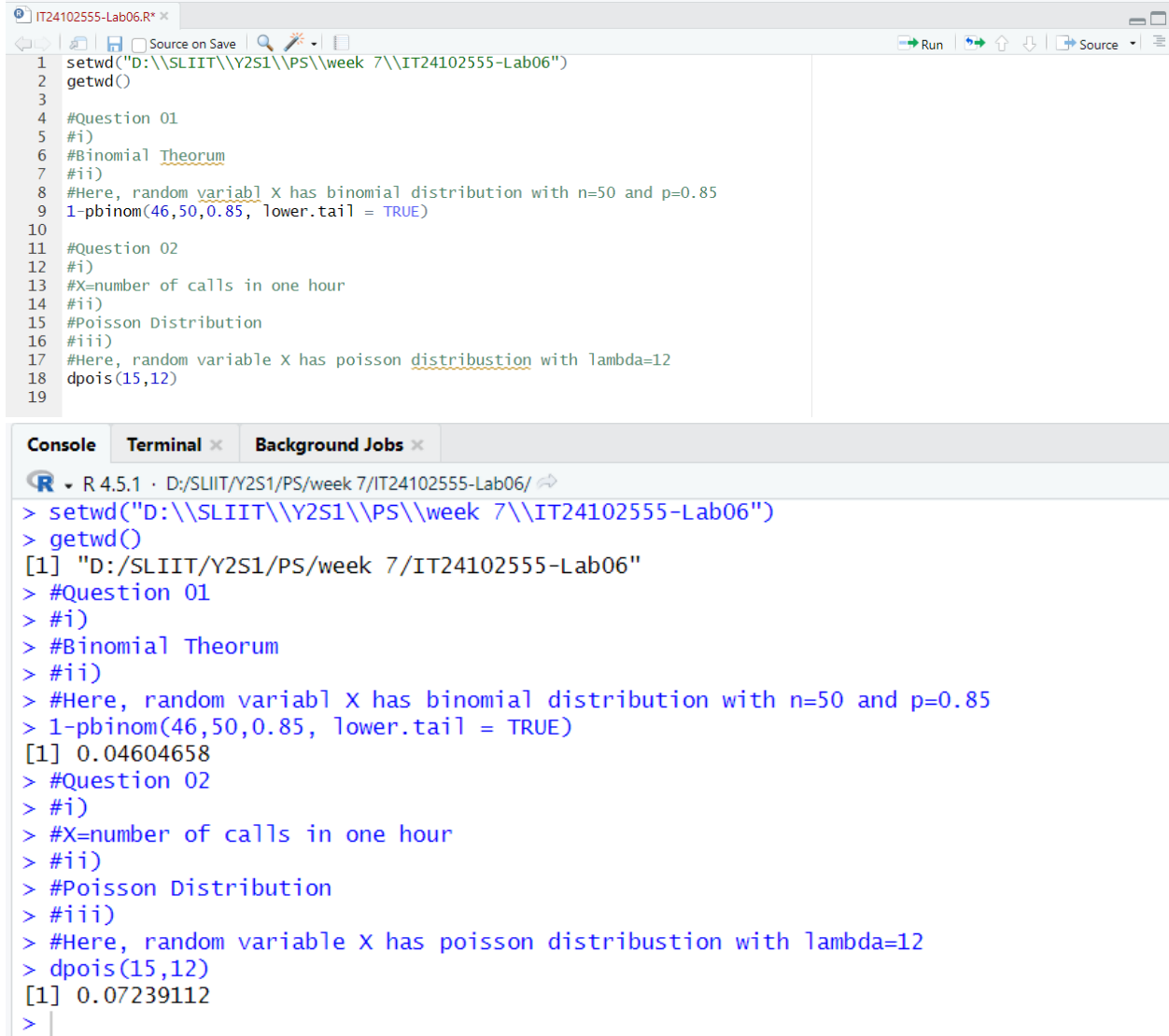


## PS-Lab 06

IT24102555

Weerathunga B.A



The screenshot displays the RStudio interface. The top pane shows an R script file named 'IT24102555-Lab06.R'. The script contains the following code:

```
1 setwd("D:\\SLIIT\\Y2S1\\PS\\week 7\\IT24102555-Lab06")
2 getwd()
3
4 #Question 01
5 #i)
6 #Binomial Theorum
7 #ii)
8 #Here, random variabl X has binomial distribution with n=50 and p=0.85
9 1-pbinom(46,50,0.85, lower.tail = TRUE)
10
11 #Question 02
12 #i)
13 #X=number of calls in one hour
14 #ii)
15 #Poisson Distribution
16 #iii)
17 #Here, random variable X has poisson distribustion with lambda=12
18 dpois(15,12)
19
```

The bottom pane shows the R console output for the executed script:

```
> R 4.5.1 · D:/SLIIT/Y2S1/PS/week 7/IT24102555-Lab06/
> setwd("D:\\SLIIT\\Y2S1\\PS\\week 7\\IT24102555-Lab06")
> getwd()
[1] "D:/SLIIT/Y2S1/PS/week 7/IT24102555-Lab06"
> #Question 01
> #i)
> #Binomial Theorum
> #ii)
> #Here, random variabl X has binomial distribution with n=50 and p=0.85
> 1-pbinom(46,50,0.85, lower.tail = TRUE)
[1] 0.04604658
> #Question 02
> #i)
> #X=number of calls in one hour
> #ii)
> #Poisson Distribution
> #iii)
> #Here, random variable X has poisson distribustion with lambda=12
> dpois(15,12)
[1] 0.07239112
>
```