EXERCISE:

```
setwd('C:\\Users\\vinod\\Desktop\\LABS\\PS\\Lab 06\\IT24104383')
getwd()
```

```
> setwd('C:\\Users\\vinod\\Desktop\\LABS\\PS\\Lab 06\\IT24104383')
> getwd()
[1] "C:/Users/vinod/Desktop/LABS/PS/Lab 06/IT24104383"
```

Question 1

i)

```
# Q1
#part 1

#Binomial Distribution
# X - the number of students who passed the test out of 50 students.
#n=50 , p =0.85
```

ii)

```
#part 2
#p(x>=47) = p(x>46)
pbinom(46, 50, 0.85, lower.tail = FALSE)
#p(x>=47) = 1 - p(x<47) = 1 - p(x<=46)
1 - pbinom(46, 50, 0.85, lower.tail = TRUE)
```

```
> #part 2
> #p(x>=47) = p(x>46)
> pbinom(46, 50, 0.85, lower.tail = FALSE)
[1] 0.04604658
> #p(x>=47) = 1 - p(x<47) = 1 - p(x<=46)
> 1 - pbinom(46, 50, 0.85, lower.tail = TRUE)
[1] 0.04604658
```

Question 2

i)

```
# Q2
#part 1
# X -number of calls a call center receives with in a hour
```

ii)

```
#part 2
#Poisson Distribution
#lambda=12
```

iii)

```
#part 3
#p(x=15)
dpois(15, 12)
```

```
> #part 3
> #p(x=15)
> dpois(15, 12)
[1] 0.07239112
```