

IT2120 - Probability and Statistics

Name: Deneshkar. P

IT No: IT24103828

#### Exercise 1

```
> # Exercise 1
> n <- 50
> p <- 0.85
> cat("X ~ Binomial(", n, ",", p, ")\n")
X ~ Binomial( 50 , 0.85 )
> prob_47_or_more <- pbinom(46, size=n, prob=p, lower.tail=FALSE)
> cat("P(X >= 47) =", prob_47_or_more, "\n")
P(X >= 47) = 0.04604658
```

#### Exercise 2

```
> # Exercise 2
> lambda <- 12
> cat("X ~ Poisson(", lambda, ")\n")
X ~ Poisson( 12 )
> prob_15 <- dpois(15, lambda)
> cat("P(X = 15) =", prob_15, "\n")
P(X = 15) = 0.07239112
```

