Exercise

IT24101546.R

```
setwd("C:\\Users\\THITHIRA.D\\Desktop\\PSLab07")
#Exercise

#1)
#Probability that the train arrives between 8:10 a.m. and 8:25 a.m
punif(25,min=0,max=40,lower.tail = TRUE) - punif(10,min=0,max=40,lower.tail = TRUE)

#2)
#Probability that an update will take at most 2 hours
pexp(2,rate = 0.333,lower.tail = TRUE)
```

Console | Terminal | Background Jobs

R 4.3.3 · C:/Users/THITHIRA.D/Desktop/PSLab07/

```
> setwd("C:\\Users\\THITHIRA.D\\Desktop\\PSLab07")
> #1)
> #Probability that the train arrives between 8:10 a.m. and 8:25 a.m
> punif(25,min=0,max=40,lower.tail = TRUE) - punif(10,min=0,max=40,lower.tail = TRUE)
[1] 0.375
>
>
> #2)
> #Probability that an update will take at most 2 hours
> pexp(2,rate = 0.333,lower.tail = TRUE)
[1] 0.4862405
>
>
> #3)
> #i)
> #Probability that a randomly selected person has an IQ above 130
> 1-pnorm(130,mean = 100,sd = 15,lower.tail = TRUE)
[1] 0.02275013
>
>
> #ii)
> #IQ score represents the 95th percentile
> qnorm(0.95, mean=100, sd=15, lower.tail = TRUE)
[1] 124.6728
>
```