

IT2120 - Probability and Statistics

Lab Sheet 07

Exercise

```
1 setwd("C:\\Users\\ashen\\OneDrive\\Desktop\\IT24104140")
2
3 a <- 0
4 b <- 40
5 p <- (25 - 10) / (b - a)
6 p
7
8 lambda <- 1/3
9 p_exp <- pexp(2, rate = lambda)
10 p_exp
11
12 mu <- 100
13 sigma <- 15
14 p_iq <- 1 - pnorm(130, mean = mu, sd = sigma)
15 p_iq
16
17 x_95 <- qnorm(0.95, mean = mu, sd = sigma)
18 x_95
19
```

```
>
> setwd("C:\\Users\\ashen\\OneDrive\\Desktop\\IT24104140")
> a <- 0
> b <- 40
> p <- (25 - 10) / (b - a)
> p
[1] 0.375
>
> lambda <- 1/3
> p_exp <- pexp(2, rate = lambda)
> p_exp
[1] 0.4865829
>
> mu <- 100
> sigma <- 15
> p_iq <- 1 - pnorm(130, mean = mu, sd = sigma)
> p_iq
[1] 0.02275013
>
> x_95 <- qnorm(0.95, mean = mu, sd = sigma)
> x_95
[1] 124.6728
> |
```
