# IT24100636 - Fernando T.M.I.U.

## IT2120- Probability and Statistics | Lab Sheet 07

**01)**

```
1  setwd("C:\\Users\\Imasha\\IT24100636")
2  # Exercise
3  #(01)
4  punif(25, min = 0, max = 40) - punif(10, min = 0, max = 40)
5
```

**Console**  **Terminal** ×  **Background Jobs** ×

R ▾ R 4.5.1 · C:/Users/Imasha/IT24100636/

```
> setwd("C:\\Users\\Imasha\\IT24100636")
> # Exercise
> #(01)
> punif(25, min = 0, max = 40) - punif(10, min = 0, max = 40)
[1] 0.375
```

**02)**

```
#(02)
pexp(2, rate = 1/3)
```

```
> #(02)
> pexp(2, rate = 1/3)
[1] 0.4865829
```

**03)**

```r
#(03)
#(i) P(IQ > 130)
pnorm(130, mean = 100, sd = 15, lower.tail = FALSE)

#(ii) 95th percentile of IQ
qnorm(0.95, mean = 100, sd = 15)
```

```r
> #(03)
> #(i) P(IQ > 130)
> pnorm(130, mean = 100, sd = 15, lower.tail = FALSE)
[1] 0.02275013
> #(ii) 95th percentile of IQ
> qnorm(0.95, mean = 100, sd = 15)
[1] 124.6728
>
```