

# IT2120 - Probability and Statistics

## Lab Sheet 07

IT24103917

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### Exercise

01)

```
1 setwd("C:\\Users\\CHAMA COMPUTERS\\OneDrive\\Desktop\\IT24104028")
2
3 #1
4 punif(25, min=0, max=40, lower.tail=TRUE) - punif(10, min=0, max=40, lower.tail=TRUE)
5
```

```
> setwd("C:\\Users\\CHAMA COMPUTERS\\OneDrive\\Desktop\\IT24104028")
> #1
> punif(25, min=0, max=40, lower.tail=TRUE) - punif(10, min=0, max=40, lower.tail=TRUE)
[1] 0.375
```

02)

```
5
6 #2
7 pexp(2, rate=1/3, lower.tail=TRUE)
8
```

```
> #2
> pexp(2, rate=1/3, lower.tail=TRUE)
[1] 0.4865829
```

03)

I.

```
9 #3
10 # (i)
11 pnorm(130, mean=100, sd=15, lower.tail=FALSE)
12
> #3
> # (i)
> pnorm(130, mean=100, sd=15, lower.tail=FALSE)
[1] 0.02275013
```

II.

```
12  
13 #(ii)  
14 qnorm(0.95, mean=100, sd=15, lower.tail=TRUE)  
15 |
```

```
> #(ii)  
> qnorm(0.95, mean=100, sd=15, lower.tail=TRUE)  
[1] 124.6728  
> |
```