Sri Lanka Institute of Information Technology

Lab Submission
<Lab Sheet No 7>

<IT24102308>

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Probability and Statistics | IT2011

B.Sc. (Hons) in Information Technology

```
> setwd("C:\\Users\\Samsung\\OneDrive\\Desktop\\IT24102308")
```

1.
```
> # P(10 < X < 25) = P(X <= 25) - P(X <= 10)
> punif(25, min=0, max=40, lower.tail=TRUE) - punif(10, min=0, max=40, lower.ta$
[1] 0.375
```

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

3.
```
> # Part i: P(X > 130)
> 1 - pnorm(130, mean=100, sd=15, lower.tail=TRUE)
[1] 0.02275013
>
>
> # Part ii: IQ score at 95th percentile
> qnorm(0.95, mean=100, sd=15, lower.tail=TRUE)
[1] 124.6728
```