

Sri Lanka Institute of Information Technology



Lab Submission
Lab sheet No 07

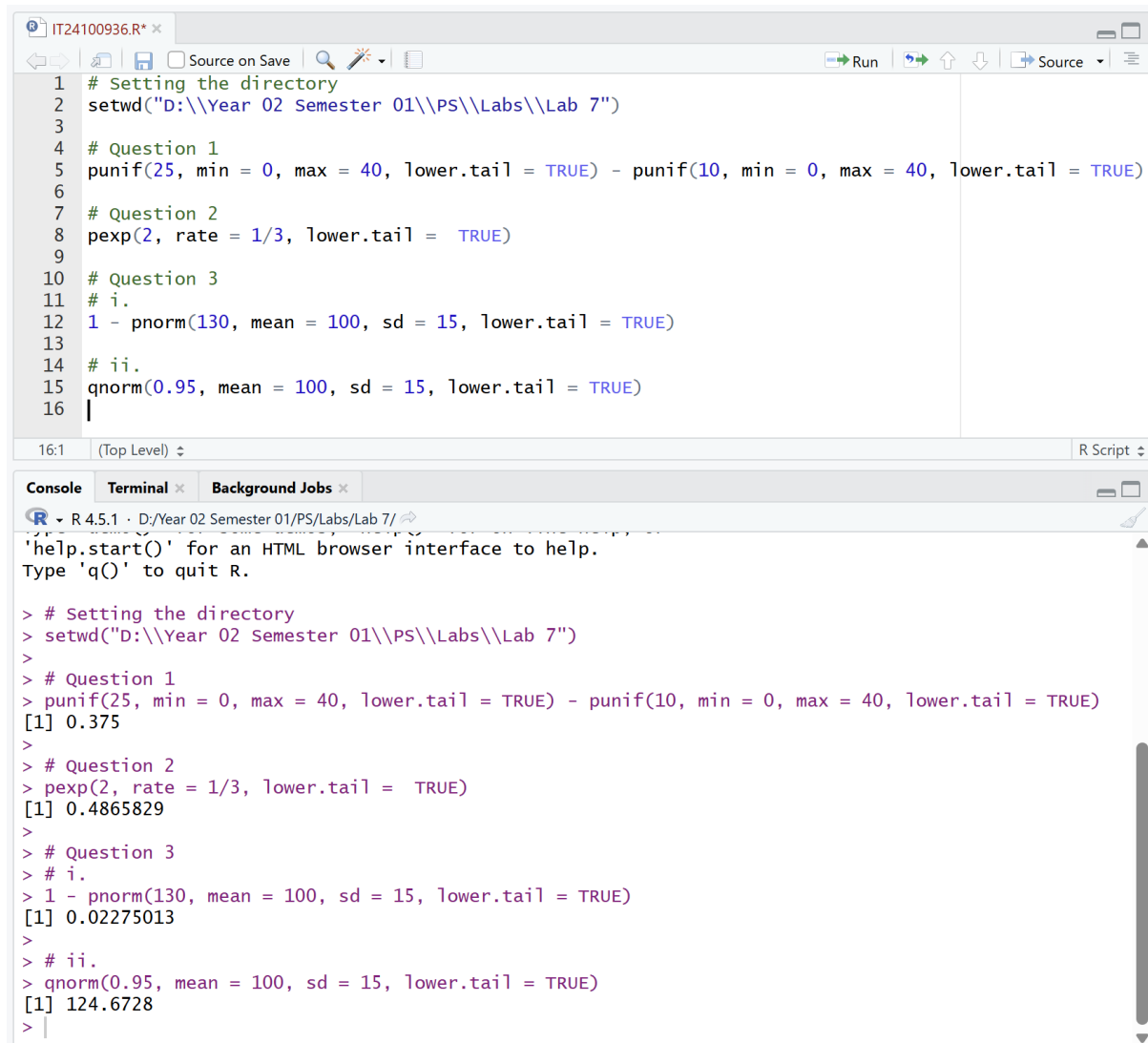
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Probability and Statistics | IT2120

B.Sc. (Hons) in Information Technology

Exercise



The screenshot shows an RStudio interface with a script editor and a console. The script editor contains the following R code:

```
1 # Setting the directory
2 setwd("D:\\Year 02 Semester 01\\PS\\Labs\\Lab 7")
3
4 # Question 1
5 punif(25, min = 0, max = 40, lower.tail = TRUE) - punif(10, min = 0, max = 40, lower.tail = TRUE)
6
7 # Question 2
8 pexp(2, rate = 1/3, lower.tail = TRUE)
9
10 # Question 3
11 # i.
12 1 - pnorm(130, mean = 100, sd = 15, lower.tail = TRUE)
13
14 # ii.
15 qnorm(0.95, mean = 100, sd = 15, lower.tail = TRUE)
16 |
```

The console shows the output of the script, with the R prompt > at the start of each line:

```
> # Setting the directory
> setwd("D:\\Year 02 Semester 01\\PS\\Labs\\Lab 7")
>
> # Question 1
> punif(25, min = 0, max = 40, lower.tail = TRUE) - punif(10, min = 0, max = 40, lower.tail = TRUE)
[1] 0.375
>
> # Question 2
> pexp(2, rate = 1/3, lower.tail = TRUE)
[1] 0.4865829
>
> # Question 3
> # i.
> 1 - pnorm(130, mean = 100, sd = 15, lower.tail = TRUE)
[1] 0.02275013
>
> # ii.
> qnorm(0.95, mean = 100, sd = 15, lower.tail = TRUE)
[1] 124.6728
> |
```