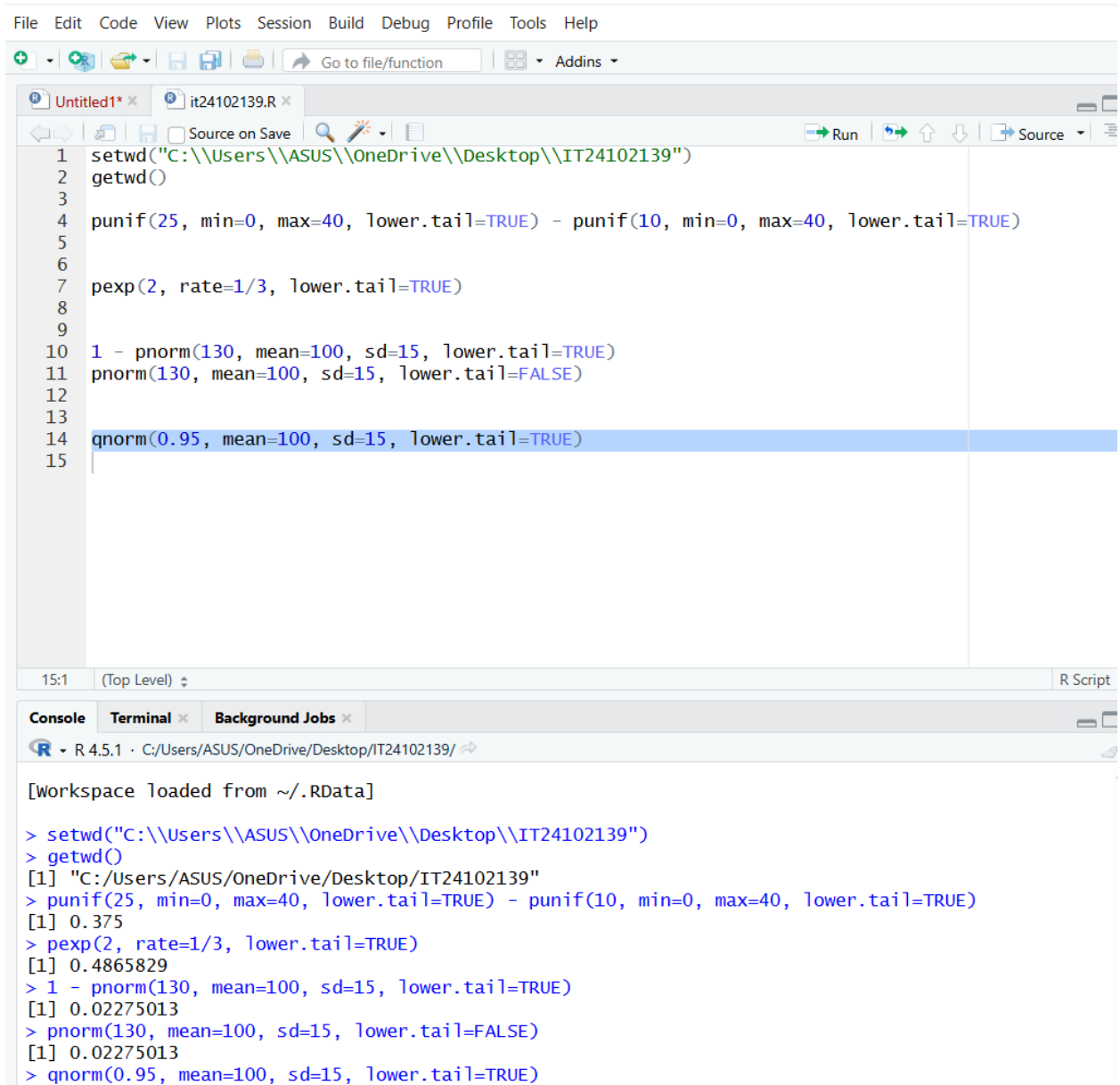


# IT2120 - Probability and Statistics

## Lab Sheet 07

IT24102139



The screenshot displays the R Studio environment. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. Below the menu is a toolbar with icons for saving, running, and other functions. The main editor window shows a script named 'it24102139.R' with the following code:

```
1 setwd("C:\\Users\\ASUS\\OneDrive\\Desktop\\IT24102139")
2 getwd()
3
4 punif(25, min=0, max=40, lower.tail=TRUE) - punif(10, min=0, max=40, lower.tail=TRUE)
5
6
7 pexp(2, rate=1/3, lower.tail=TRUE)
8
9
10 1 - pnorm(130, mean=100, sd=15, lower.tail=TRUE)
11 pnorm(130, mean=100, sd=15, lower.tail=FALSE)
12
13
14 qnorm(0.95, mean=100, sd=15, lower.tail=TRUE)
15
```

The status bar at the bottom indicates '15:1 (Top Level)' and 'R Script'. Below the editor is a console window showing the output of the script:

```
[Workspace loaded from ~/.RData]
> setwd("C:\\Users\\ASUS\\OneDrive\\Desktop\\IT24102139")
> getwd()
[1] "C:/Users/ASUS/OneDrive/Desktop/IT24102139"
> punif(25, min=0, max=40, lower.tail=TRUE) - punif(10, min=0, max=40, lower.tail=TRUE)
[1] 0.375
> pexp(2, rate=1/3, lower.tail=TRUE)
[1] 0.4865829
> 1 - pnorm(130, mean=100, sd=15, lower.tail=TRUE)
[1] 0.02275013
> pnorm(130, mean=100, sd=15, lower.tail=FALSE)
[1] 0.02275013
> qnorm(0.95, mean=100, sd=15, lower.tail=TRUE)
```