

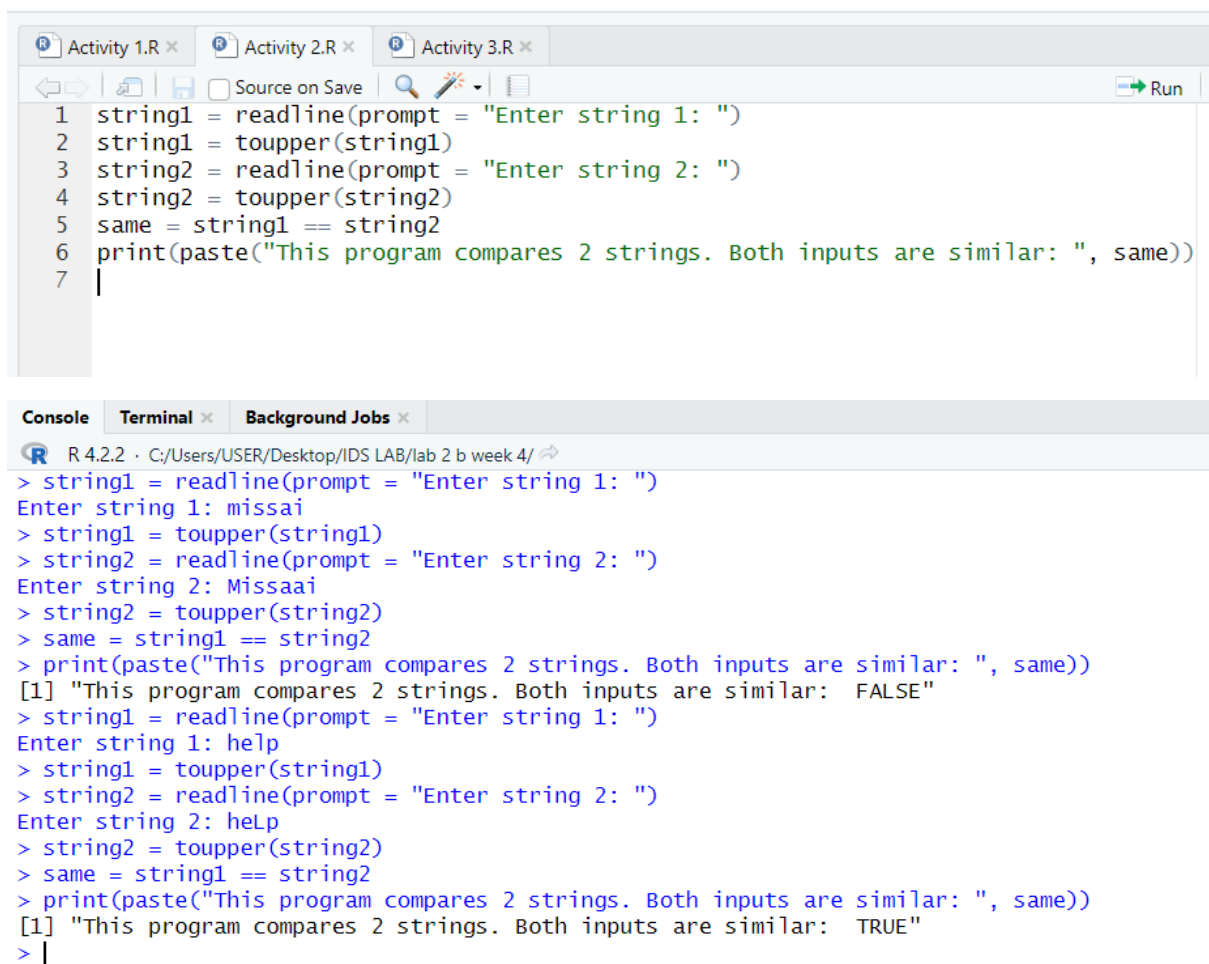
## Week 4 Lab 2B – AHMAD ZULHARITH BIN ZULKIFLI 20001347

### Activity 1

```
lab 2 b week 4 - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
Activity 1.R x Activity 2.R x Activity 3.R x
Source on Save
1 weight = readline(prompt = "Enter the weight: ")
2 weight = as.numeric(weight)
3
4 Height = readline(prompt = "Enter the Height in m: ")
5 Height = as.numeric(Height)
6
7 BMI = weight/(Height*Height)
8
9 a = 18.4
10 b = 24.9
11 c = 39.9
12 d = 40.0
13
14 Underweight = (BMI<=a)
15 Normal = (BMI <=b && BMI > a)
16 Overweight = (BMI <=c && BMI > b)
17 Obese = (BMI >= d)
18
19 print(paste("Underweight: ",Underweight))
20 print(paste("Normal: ", Normal))
21 print(paste("Overweight: ", Overweight))
22 print(paste("Obese: ", Obese))
23
```

```
Console Terminal x Background Jobs x
R 4.2.2 · C:/Users/USER/Desktop/IDS LAB/lab 2 b week 4/
> weight = readline(prompt = "Enter the weight: ")
Enter the weight: 100
> weight = as.numeric(weight)
> Height = readline(prompt = "Enter the Height in m: ")
Enter the Height in m: 1.59
> Height = as.numeric(Height)
> BMI = weight/(Height*Height)
> a = 18.4
> b = 24.9
> c = 39.9
> d = 40.0
> Underweight = (BMI<=a)
> Normal = (BMI <=b && BMI > a)
> Overweight = (BMI <=c && BMI > b)
> Obese = (BMI >= d)
> print(paste("Underweight: ",Underweight))
[1] "Underweight: FALSE"
> print(paste("Normal: ", Normal))
[1] "Normal: FALSE"
> print(paste("Overweight: ", Overweight))
[1] "Overweight: TRUE"
> print(paste("Obese: ", Obese))
[1] "Obese: FALSE"
>
```

## Activity 2



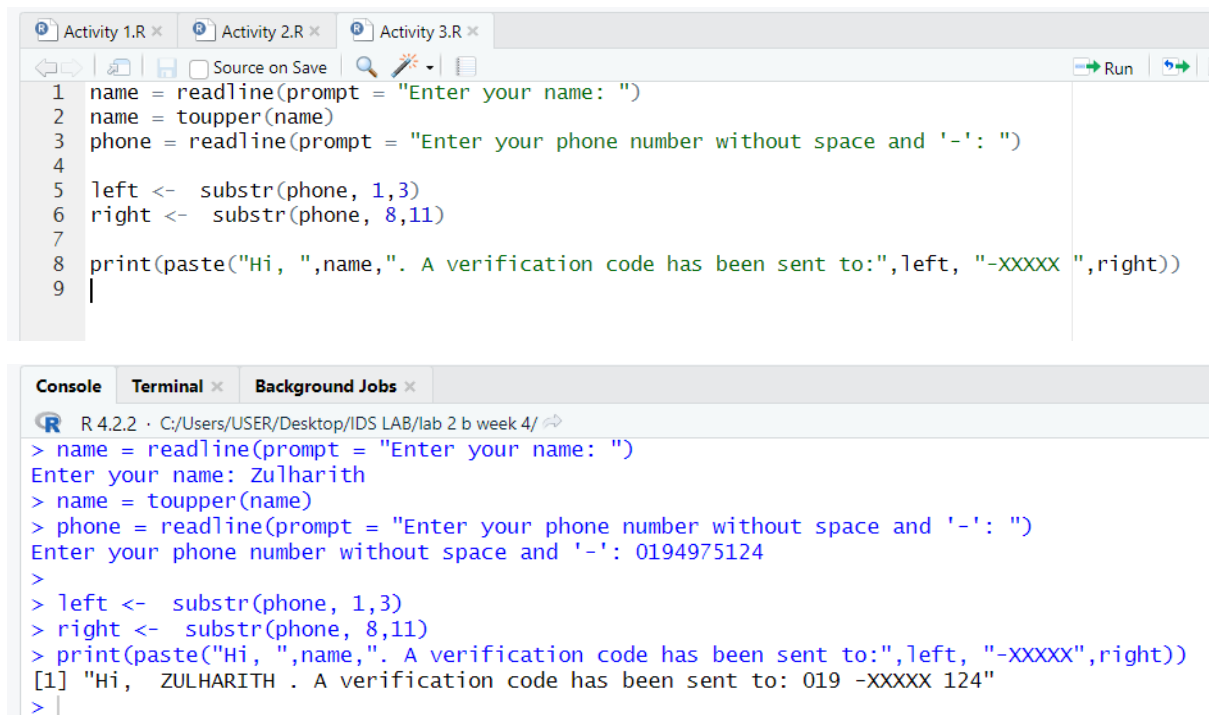
The screenshot displays the RStudio IDE interface. The top pane shows a script with the following R code:

```
1 string1 = readline(prompt = "Enter string 1: ")
2 string1 = toupper(string1)
3 string2 = readline(prompt = "Enter string 2: ")
4 string2 = toupper(string2)
5 same = string1 == string2
6 print(paste("This program compares 2 strings. Both inputs are similar: ", same))
7 |
```

The bottom pane shows the console output for two test cases:

```
R 4.2.2 · C:/Users/USER/Desktop/IDS LAB/lab 2 b week 4/ ↗
> string1 = readline(prompt = "Enter string 1: ")
Enter string 1: missai
> string1 = toupper(string1)
> string2 = readline(prompt = "Enter string 2: ")
Enter string 2: Missaai
> string2 = toupper(string2)
> same = string1 == string2
> print(paste("This program compares 2 strings. Both inputs are similar: ", same))
[1] "This program compares 2 strings. Both inputs are similar: FALSE"
> string1 = readline(prompt = "Enter string 1: ")
Enter string 1: help
> string1 = toupper(string1)
> string2 = readline(prompt = "Enter string 2: ")
Enter string 2: help
> string2 = toupper(string2)
> same = string1 == string2
> print(paste("This program compares 2 strings. Both inputs are similar: ", same))
[1] "This program compares 2 strings. Both inputs are similar: TRUE"
> |
```

### Activity 3



```
Activity 1.R x Activity 2.R x Activity 3.R x
Source on Save Run

1 name = readline(prompt = "Enter your name: ")
2 name = toupper(name)
3 phone = readline(prompt = "Enter your phone number without space and '-': ")
4
5 left <- substr(phone, 1,3)
6 right <- substr(phone, 8,11)
7
8 print(paste("Hi, ",name,". A verification code has been sent to:",left, "-XXXXX ",right))
9 |

Console Terminal x Background Jobs x
R 4.2.2 · C:/Users/USER/Desktop/IDS LAB/lab 2 b week 4/ ↗
> name = readline(prompt = "Enter your name: ")
Enter your name: Zulharith
> name = toupper(name)
> phone = readline(prompt = "Enter your phone number without space and '-': ")
Enter your phone number without space and '-': 0194975124
>
> left <- substr(phone, 1,3)
> right <- substr(phone, 8,11)
> print(paste("Hi, ",name,". A verification code has been sent to:",left, "-XXXXX",right))
[1] "Hi, ZULHARITH . A verification code has been sent to: 019 -XXXXX 124"
> |
```