**Quiz 1**

DSA1101 – Semester 2 AY2425

In the R code file for Topic 1, <Topic1\_Rcode.R>, there is a part of code (in blue) and its output was given.

Column "color" is to specify the darkness of shell's color of a crab, where 2 means light color; 3 means medium color; 4 means dark color; and 5 means darker color.

Column "spine" is to specify the conditions of the spines of the crab: 1 means both spines are good; 2 means one of the two spines is worn or broken; 3 means both spines are worn or broken.

data1<-read.csv("C:/Data/crab.txt",sep = "", header = TRUE)

data1[1:8,] #first 8 rows. The output is below.

color spine width satell weight

1 3 3 28.3 8 3.05

2 4 3 22.5 0 1.55

3 2 1 26.0 9 2.30

4 4 3 24.8 0 2.10

5 4 3 26.0 4 2.60

6 3 3 23.8 0 2.10

7 2 1 26.5 0 2.35

8 4 2 24.7 0 1.90

Use it to answer questions below.

Note: solution is highlighted.

Q1. The values (2, 3, 4 and 5) in the column “color” in the data frame above are automatically recognized by R as the characters that represent the darkness of color. True or False?

Q2. To let R recognizes the values of the second column of the data frame above as a categorical column, we need to use a function to convert this column into a factor (\*). True or False?

(\*) such as function **as.factor()**

Q3. The following command retrieves the values from the 5th column of the dataframe 'data1'. True or False?

**data1[ 5 ,  ]**

Q4. The following command retrieves the values from the 5th column of the dataframe 'data1'. True or False?

**data1$weight**

Q5. The following command retrieves the values from the 5th column of the dataframe 'data1'. True or False?

**weight**