**Instructions: Please read carefully**

* Please rename this file as only your ID number **(e.g. 21-\*\*\*\*\*-1.docx or 21-\*\*\*\*\*-1.pdf).**
* Submit the file before **10:59am on 14/10/2023** in the **Teams.**

**Do not Copy!!!**

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| 1. How to read input data from a file using scan () function. |
| **Your code here: r <- scan("E:/R Language/mystring.txt", what = "")** |
| **Your whole Screenshot here: (Console Output):** |

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| 1. Create a Matrix **B** with 3 rows and 5 columns. Perform the following. 2. Select the 3rd column of the matrix B 3. Select 2nd row of the matrix B. 4. Select first row and 3rd column .B(1,3) |
| **Your code here:**   1. **B <- matrix(1:15, nrow = 3, ncol = 5)**   **print(third <- B[,3])**   1. **B <- matrix(1:15, nrow = 3, ncol = 5)**   **print(second\_r <- B[2,])**   1. **B <- matrix(1:15, nrow = 3, ncol = 5)**   **print(first\_row\_third\_col <- B[1,3])** |
| **Your whole Screenshot here: (Console Output):** |

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| 1. Create two matrix A and B. perform A+B. |
| **Your code here:**  **A <- matrix(1:6, nrow = 2, ncol = 3)**  **print(A)**  **B <- matrix(1:6, nrow = 2, ncol = 3)**  **print(B)**  **sol <- A + B**  **print(sol)** |
| **Your whole Screenshot here: (Console Output):** |

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| 1. Consider the numeric vector c(2,3,5,9,12,15). Write an R command that determines how many elements in the vector are exactly divisible by 5. |
| **Your code here:**  **v <- c(2, 3, 5, 9, 12, 15)**  **div\_5 <- sum(v %% 5 == 0)**  **print(div\_5)** |
| **Your whole Screenshot here: (Console Output):** |

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| 1. Consider the numeric vector c(30,50,70,90). Perform the following. 2. Add new element 40 to the vector. 3. Delete 70 form the vector. |
| **Your code here:**   1. **v <- c(30, 50, 70, 90)**   **v <- append(v, 40)**  **print(v)**   1. **v <- c(30, 50, 70, 90)**   **R <- 70**  **v <- setdiff(v, R)**  **print(v)** |
| **Your whole Screenshot here: (Console Output):** |

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| |  | | --- | | 1. Create a data frame named dataframe according to the following table     Make another data frame named dataframe2 according to the following table.    Then combine these two data frames into a single data frame called mydataframe.  Now find the value of names and ages from mydataframe who are only female and have a level of funny of “ High or Low. | | **Your code here:**  **dataframe <- data.frame(**  **person = c("Stan", "Francine", "Steve", "Roger", "Abigail", "Klaus"),**  **sex = c("M", "F", "M", "M", "F", "M"),**  **funny = c("High", "Med", "Low", "High", "High", "Med"),**  **age = c(42, 37, 19, 35, 23,20)**  **)**  **dataframe2 <- data.frame(**  **person = c("Fredrico", "Roberta", "Alfred", "Bruce"),**  **age = c(42, 37, 19, 35),**  **sex = c("M", "F", "M", "M"),**  **funny = c("High", "Med", "Low", "High")**  **)**  **mydataframe <- rbind(dataframe, dataframe2)**  **print(mydataframe)** | | **Your whole Screenshot here: (Console Output):** | |
| **Your code here:** |
| **Your whole Screenshot here: (Console Output):** |