ASSIGNMENT:1

Note: Install dplyr package if not done already.

1. Write a R program that produces the following matrix, preallocate the matrix with NA values.

0	1	2	3	4
1	0	1	2	3
2	1	0	1	2
3	2	1	0	1
4	3	2	1	0

- 2. Write a R program to print column names and number of characters in column name of the inbuilt iris dataset. [Hint: Use nchar() function]
- 3. Read the given **data.csv** file in RStudio. First try reading it by storing it in the same directory as that of working directory of RStudio. Next try reading it by saving .csv in different directory.
- a.) Display no. of rows and columns of the data using nrow() and ncol() function.
- b.) Display first 10 rows of data.
- c.) Display statistics of that data.
- d.) Iterate over the order_id of the data. If order_id > 80000, print "The product purchased is <u>product_id</u> and orderid for this purchase is <u>order_id</u>".
- e.) Print order id corresponding to product id "Organic Fuji Apple".

4.

- a.) Write a R program that prints out standard random normal numbers (use rnorm()) but stops if you get a number bigger than 1.
- b.) Modify the previous loop so that it doesn't print negative numbers. (Terminating condition is still the same)
- 5. Write a R program to check whether a number is palindrome number or not. (A palindrome number is same when read from left to right or right to left. E.g. 131)