

RM Coding Task Phase Worksheet – 2

Date Issued: 7/12/2020

Date Due: 10/12/2020

1. Write a function for Bubble and Selection Sort. Ask the user for which method to use: 's' for Selection Sort and 'b' for Bubble Sort. Call the correct **function** based on the user's choice. After sorting the array, call another **function** that implements Binary Search to find the position of the number taken as input from the user. [Take the array as input from the user].
2. Write a **function** to find the length of a string using pointers.
3. Write a **function** to copy a string into another string using pointers.
4. Write two **functions**:
 - i. To perform matrix multiplication
 - ii. To find transpose of a matrix.

Use two matrices to verify the identity $(A.B)' = B' . A'$

5. (a) Given a 2D character array, where each row is a string, write a **function** which rearranges the strings in ascending order based on their lengths.

Input: word

number

cat

Output: cat

word

number

- (b) Also, sort each individual string in ascending order.

Output: act

dorw

bemnru