

# Data Structures & Algorithms III– SCS 2201

## String Matching Assignment

### **Explanation of the program**

- Use naïve string machine algorithm because it is simplicity to be modified and implemented of this case of matching wildcard.
- Modifying other algorithms for this case turned out to require more logical changes and was more complex so naïve algorithm was used.
- The naïve algorithm is modified so that it skips over to the next character if an wildcard ('\_') is found.

### **Some special points of the code**

- I use “stringmatch” function for string matching and create output file and write test, pattern and display the index of string matching. If there is not string matching it will display “No match result found”. I use flag2 to find that there is not any result.
- I use if condition and flag1 in stringmatch function to neglect the mismatch.
- I use if condition to popup error message whenever user doesn't enter number between 0-9.
- I use for loop to read pattern and text files and create output files.
- I use while loop to remove extra output files which were generated in the previous execution.