Programming – TU857/1

Lab 15 – Thursday, February 29ᵗʰ, 2024

Note: You are expected to finish all programs in your own time if you do not get these done during the lab session. This is your own responsibility.

Strings (part 2)

Remember: Use Symbolic names in your programs. Do not hard-code.

Write separate programs to:

1.   Q9, Q11 – see below (Hint: Remember how to compare strings?)

2.   Write a program that reads a sentence from standard input and uses separate functions to do the following:

   a) Calculates the number of characters in the sentence.
   b) Appends the sentence to the end of the following string: "My sentence is : "

3.   Write a program that allows a user to input two words. Compare these words to see if they are the same. Display appropriate messages whether or not the two words are the same.

   Mandatory Exercise Question – You must complete and Demo to your Lab TA
4.   Using **separate functions** for part (a) and (b) below, extend your program in Q3 to do the following:

   a) Concatenate the first word entered to the end of the string: "First word entered is ". Display this entire string on the screen.
   b) Calculate the length of the string in part (a) above and display the number of characters used.

9. Write a program to ask a user for their name. The user's name is then compared with a list of names held in an array in memory. If the user's name is in this list, display a suitable greeting; otherwise display the message "Name not found".

10. Write a program to input a four-character string. If every character in the string is a digit (0-9), then convert the string to an integer, add 1 to it, and display the result. If any one of the characters in the string is not a digit, display an error message.

11. The following is a list of countries and their capital cities.

Australia	Canberra
Belgium	Brussels
China	Beijing
Denmark	Copenhagen
England	London
France	Paris
Greece	Athens
Ireland	Dublin
Scotland	Edinburgh
Wales	Cardiff

Write a program to input a country and display the capital city of that country.