|  |  |
| --- | --- |
| **Week 5 Task** | **Title: Arrays and Strings** |
| **Name and Student ID** |  |

**Tutorial Task(s)**

1. Explain the keywords and key terms: a) Array identifier b) Array Initialization c) Scalar variable d) Scanset e) Size of array f) string compare g) string copy h) string manipulation
2. Explain the concept of array?
3. Mention the reason” can array index can be negative?
4. Why it is necessary to give the size of an array in array declaration?
5. Explain one -dimensional , two dimensional and strings?
6. Demonstrate the storage of two-dimensional arrays in a memory with help of diagram?
7. Why does array subscripts start at 0 instead of 1?
8. What are the characteristics of array?
9. Why do we have a null character (‘\0 or NUL) at the end of string?
10. If a string str contains string literal “ Coimbatore institute of technology” , then is it legal to print the string using statement printf(str);?

Practice!!!

1. Write a program that perform the following:

The user inputs a number and then enters a series of number from 1 to that number. Your program should determine which number ( or numbers) is missing or duplicated in the series, if any, For example, if the user entered 5 as the initial number and then entered the following sequences, the result should be as shown.

Input Sequence Output

----------------------- ----------

1 2 3 4 5 Nothing bad

However if 7 were the highest number, the user would see the results on the right for the following number entries:

Input Sequence Output

----------------------- ----------

1 2 3 4 5 Missing 6

Missing 7

And if 10 were the highest number and the user entered the numbers shown on the left, note the list of missing and duplicate numbers:

Input Sequence Output

----------------------- ----------

1 2 4 7 4 4 5 10 8 2 6 Duplicate 2 ( 2 times)

Missing 3

Duplicate 4 (3times)

Missing 9

The program should check the highest number that the user input to ensure that it does not exceed the size of any array you might be using for storage

1. Write a program for following problems related to string:
2. Read a word and rewrite it in alphabetical order
3. Take the name of person as input and print the first letter of the first name and middle name(if any) and the title as it is, e.g., Raj Kumar Santhoshi as R.K. Santhoshi
4. To find a string within a sentence and replace it with another string
5. Delete a word from a sentence. Note that the word may appear any number of times.