Programming Fundamentals LAB – BSDSF24
(Both Morning and Afternoon)
Lab 13 – 20-11-2024

use notepad++ and developer command prompt for the following tasks (10 mark each)

IN LAB TASKS (10 mark each)

1. Write a function that returns the length of the **string** type parameter. Logic must be based on **loop**, **condition**, and **end of string** terminator. Later, test the function.
   e.g. if string is "Rahim Yar Khan", your function should return 14, and for "Tom" 3 is length.

2. Write a function that returns the reverse of the **string** type parameter. Logic must be based on **loop**, **condition**, and **end of string** terminator. Later, test the function.
   e.g. if string is "evil", your function should return "live", and for "mug" "gum" to be returned.

3. Write a function that tests the **string** type parameter for palindrome, and returns true if parameter is palindrome, otherwise return false. Logic must be based on **loop**, **condition**, and **end of string** terminator. Later, test the function.
   Palindrome: a word whose reverse is itself
   e.g. if string is "madam", your function should return true, and for "Lahore" it returns false.

4. Demonstrate the use of pointer variables and indirection operator for finding the greater of two inputs for real numbers.
   Note: after declaring variable, you are not allowed to use their names.

5. Demonstrate the use of pointer variables and indirection operator for input and output of **struct student** having rollno, name, matric and intermediate marks as its component.

TAKE HOME LAB TASKS (50 marks)

6. Create a menu based program that keeps track of records of potential cricket players that can be part of the district team. The player related data to manage is (name: string, runs: int, hundreds: int, wickets: int, catches: int, availability: bool), name is taken as single word due to input constraint. The program displays the menu given below and for each option call a separate function to perform task and then again, the menu will be displayed. The program at its start gets protentional players count and create pointer based array of that size, and it may filled data for several players (not all) through code.

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0: Close Program   1: List   2: Name Search   3: Add New   4: Remove by Name   5: Update by Name
Your Choice: _
```

-- End of Lab --