United International University (UIU)

Dept. of Computer Science & Engineering (CSE)
MID   Year: 2020   Trimester: Fall   Program: BSCSE
Course: CSI 412 Compiler Lab
Marks: 20, Time: 75 Min(Coding) + 15 Min(Submission) = 1 Hour & 30 Minutes TOTAL

[1] Create a menu with Option 1 would run the regular expression program below and Menu Option 2 will close the program. Put the entire code in an infinite while loop. Write a program to execute a regular expression that will accept a string with the following criteria. **You are not allowed to use any Regular Expression related library functions.**   **[10]**

    i.   begin with a first name of a human(all capital letters without numbers and special characters)

    ii.   after the name, a character can be any one of these three only (@, #, $)

    iii.   then, a constant string "UIU"

    iv.   then, a digit between range 1 to 3

    v.   after the digit, add 3 consecutive(পর পর) number from 001-999 (must not accept 000)

    vi.   then, an operator **+** or **-** or empty(null)

Accept	Not Accept
KARIM@UIU1415+ NAHID$UIU3110- JACK#UIU2001	KARIM#N1455 NAHID@UIU1000 JACK$UIU0125 1JACK#UIU2001 Jack@UIU2001 NAHID$UIU3110*B

[2] Create a menu with Option 1 would run the regular expression program below and Menu Option 2 will close the program. Put the entire code in an infinite while loop. Write a program to execute a regular expression that will accept a string with the following criteria. **You are not allowed to use any Regular Expression related library functions.**   **[10]**

    i.   Smart with " (double quote)

    ii.   Then, an odd (বিজোড়) number with 3 digit

    iii.   Then, any one of these two boolean word "true" or "false"(in small characters)

    iv.   Then, 2 consecutive capital characters(without special characters)

    v.   Then, 2 consecutive small characters(without special characters)

    vi.   Then, last 3 digit of your id

    vii.   End with " (double quote)

Accept	Not Accept
"131falseAAaa133" "725trueHGbc224" "627falseUYcc720"	"132falseAAaa133" 725trueHGbc224 "627karimUYcc720" "627falseUYCA720"