United International University (UIU)

Dept. of Computer Science & Engineering (CSE)

ASSIGNMENT 1

Faculty: Nahid Hossain (NHn)

Design a single program with all the following regular expressions using any programming language of your choice. Choose the language appropriately. You are not allowed to change the language in your future assignments. Copying code is strictly prohibited. Fully or partially copied code from Internet or Friend = 0 Mark. However, if you do the code by your own and completed partially you will get a decent partial mark.

1. Design a regular expression that would accept only UIU CSE ID.

Accept: 011153189, 011113001, 011192100

Not Accept: 012153189, 011194125, 011192000, 01122123

2. Design a regular expression that would accept only general complex number format.

Accept: 3+2i, a+bi, a+i2, z=a+ib, y = 2+i3

Not Accept: 3+2, 2, i2, i2+3, 2+a

- 3. Design a regular expression that would accept a string with the following criteria.
 - i. Start with a digit
 - ii. Second character is any capital English alphabet
 - iii. Third character cannot be alphabet
 - iv. Fourth to rest, combination of both alphabet and character

Accept: 2D2255655, 5Z2JOHN, 8X2A2B3C4, 9Y3

Not Accept: 2DA2515, 5C, A25C, 3c4256

4. Design a regular expression that would accept both integer and floating point number.

Accept: 2, 5.25, +2, -2.5, .234, +.256

Not Accept: comp, 5.2a, 252., +a.5

- 5. Design the regular expression that would accept password based on the following criteria.
 - I. At least eight characters.
 - II. At least one uppercase character.
 - III. At least one lowercase character.
 - IV. At least one number.
 - V. Finish with a special character (@, #, \$, &)

Accept: 2154Ab254@, AbBCDFE8F\$, 8Xx25154#
Not Accept: 21514258@, 8A22541524#, 9Hg225@

IMPORTANT DATES:

1st Week – Understanding | 2nd Week – Progress Show | 3rd Week - Final Submit