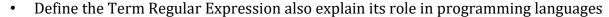
## Class: BS CS Fall 2022 (5<sup>th</sup>)

Course Name: Theory of Programming Language Course Code: CS IT 507

Assignment # 1 Total Points: 5 Date: 25-09-2024 Submission Date: 27-09-2024

Course Instructor: Dr. Nasir jalal CS & IT Department Cholistan University of Veterinary and Animal Sciences Bahawalpur



• Write RegEx for the language accepting all the string which are starting with 1 and ending with 0, over  $\Sigma = \{0, 1\}$ .

Ans: 
$$R = 1 (0+1)^* 0$$

Create a RE that accept only hexadecimal numbers

Ans:  $^[0-9a-fA-F]+$$ 

## **Explanation:**

- ^: Ensures that the match starts at the beginning of the string.
- [0-9a-fA-F]: Matches any hexadecimal digit (0-9, a-f, or A-F).
- +: Ensures that the pattern matches one or more hexadecimal characters.
- \$: Ensures that the match ends at the end of the string.
- Create a RE that accept only mobile number only from Pakistan (pakistan mobile number start with +92) and total numeric numbers are 13

Ans:  $pattern = "/^+92[0-9]{10}$ ; pattern = "+923001234567";

Differentiate between {10} and {10,} in RegEx

Ans: {10} Matches exactly 10 characters. {10,} mean 10 or more characters