#### Assignment\_7

Python Basic Assignment:

1. What is the name of the feature responsible for generating Regex objects?

Ans: in regular expression re.compile()

2. Why do raw strings often appear in Regex objects?

Ans:  raw string notation (r"text\reduce\condition") keeps regular expressions meaningful and confusion-free

3. What is the return value of the search() method?

Ans: It only returns the first occurrence of the search pattern

4. From a Match item, how do you get the actual strings that match the pattern?

Ans:  its finds the pattern only at the beginning of the string and returns the matched object

5. In the regex which created from the r'(\d\d\d)-(\d\d\d-\d\d\d\d)', what does group zero cover? Group 2? Group 1?

Ans: Group 0 🡪(\d\d\d)-(\d\d\d-\d\d\d\d)

Group 1 🡪(\d\d\d)

Group 🡪)-(\d\d\d-\d\d\d\d)

6. In standard expression syntax, parentheses and intervals have distinct meanings. How can you tell a regex that you want it to fit real parentheses and periods?

Ans: with the help of blackslash.

7. The findall() method returns a string list or a list of string tuples. What causes it to return one of the two options?

Ans: string of tuples will return.

8. In standard expressions, what does the | character mean?

Ans: it matching either or another between others group.

9. In regular expressions, what does the character stand for?

Ans: pass

10.In regular expressions, what is the difference between the + and \* characters?

Ans: + means one or more and \* means zero or more.

11. What is the difference between {4} and {4,5} in regular expression?

Ans: I think its an dictonary

12. What do you mean by the \d, \w, and \s shorthand character classes signify in regular expressions?

Ans: \d 🡪digit, \w 🡪 word, \s🡪space char

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14. What is the difference between .\*? and .\*?

Ans: .\* means import all files from libraries.

15. What is the syntax for matching both numbers and lowercase letters with a character class?

Ans: [a-z0-9]

16. What is the procedure for making a normal expression in regax case insensitive?

Ans: Pass

17. What does the . character normally match? What does it match if re.DOTALL is passed as 2nd argument in re.compile()?

Ans: Pass

18. If numReg = re.compile(r'\d+'), what will numRegex.sub('X', '11 drummers, 10 pipers, five rings, 4 hen') return?

Ans: x drummers, x pipers, five rings, x hens

19. What does passing re.VERBOSE as the 2nd argument to re.compile() allow to do?

Ans: Pass

20. How would you write a regex that match a number with comma for every three digits? It must match the given following:

'42'

'1,234'

'6,368,745'

but not the following:

'12,34,567' (which has only two digits between the commas)

'1234' (which lacks commas)

Ans: re.compile(r'\d{3})\*$,^\d{1,3}(,')

21. How would you write a regex that matches the full name of someone whose last name is Watanabe? You can assume that the first name that comes before it will always be one word that begins with a capital letter. The regex must match the following:

'Haruto Watanabe'

'Alice Watanabe'

'RoboCop Watanabe'

but not the following:

'haruto Watanabe' (where the first name is not capitalized)

'Mr. Watanabe' (where the preceding word has a nonletter character)

'Watanabe' (which has no first name)

'Haruto watanabe' (where Watanabe is not capitalized)

Ans: re.compile(r' [a-z] [A-Z]\*\sNakamoto')

22. How would you write a regex that matches a sentence where the first word is either Alice, Bob, or Carol; the second word is either eats, pets, or throws; the third word is apples, cats, or baseballs; and the sentence ends with a period? This regex should be case-insensitive. It must match the following:

'Alice eats apples.'

'Bob pets cats.'

'Carol throws baseballs.'

'Alice throws Apples.'

'BOB EATS CATS.'

but not the following:

'RoboCop eats apples.'

'ALICE THROWS FOOTBALLS.'

'Carol eats 7 cats.'

Ans: Pass