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

Ans: re.compile()

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

Ans: because ‘\’ is consider as the escape character if we use regular expression

Whereas raw string appears in regex object because they don’t consider \ as esc character.

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

Ans: it will search all the location in the string for the matching pattern

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

Ans: match() is the method in which if its passed it will only return the first match it will encounter in the string.

1. 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) the whole set , group(1) covers (\d\d\d) group(2) covers(\d\d\d-\d\d\d\d)

1. 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: backslash(\) is used to fit parentheses and periods eg \.,\, etc,

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

Ans: beause findall is used to return all the matching pattern of the string.

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

Ans: | is a symbol for OR expression. Eg. re.compile(r’(Mr|Mrs|Ms))

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

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

Ans: These are the Meta Characters in the regex objects:

“+” means one or more occurrence of the pattern in the string

“\*” means zero or more occurrence of the patter in the string

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

Ans: {4} means the pattern should match number of times its specified in curly braces

{4,5} means the pattern should occur between 4 and 5 times

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

Ans: \d = check if there’s any digits in the string

\s = checks if there’s any whitespace character in the string

\w = check every matched word in the string.

13. What do means by \D, \W, and \S shorthand character classes signify in regular expressions?

Ans: \D = checks and matches character which is not a decimal digit.

\W = checks and match the character which is not a word character.

\S = checks and match the character which is not whitespace.

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

Ans: .\*? it matches the every pattern in the string including new line , whitespace etc.

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

Ans re.compile(r'([a-zA-Z0-9-.\*?])')

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

Ans: In python we use re module to import regular expression module to convert normal exp to regex exp

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

Ans: 1) “.” matches all character in the string except the newline

2) pattern = re.compile(r'.',re.DOTALL)

Matches everything in the string along with newline

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

Ans: nothing because \d will only matches the digits in the string pattern

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

Ans: This will allows us to write regular expressions that look nicer and are more readable by allowing you to visually separate logical sections of the pattern and add comments.

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{1,3}(,\d{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'\b[A-Z][a-zA-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: re.compile(r'(Alice|Bob|Carol)\s+(eats|pets|throws)\s+(apples|cats|baseballs)\.', re.IGNORECASE)