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

A : re.compile()

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

A : raw strings are used to prevent backslashes from missing out in search

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

A :Returns match objects

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

A : group() is used to group matched objects

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?

A : Group zero - entire match

Group 2 – second set of parentheses

Group 1 – First set of parentheses

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?

A : Backslash is used to escape characters

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

A : If the regex has no group, it returns list of strings. If the regex has group it returns list of tuples

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

A : ‘either,or’

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

A : A list of characters that qualify for match in search

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

A : ‘+’ – matches one or more ; ‘\*’ – matches zero or more

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

A :{4} : Matches exactly 4 instances of preceding group, {4,5} : matches between 4 and 5 instances

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

A : \d – single digit ; \w – word ; \s – space character

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

A : match a single character that is not digit, word or space

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

A : .\*? – is a greedy quantifier, matches as many characters as possible.

(.\*)? – non greedy quantifier, matches a few characters possible

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

A : [0-9a-z] or [a-z0-9]

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

A : Passing re.I as the second argument to re.compile() makes it case insensitive

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

A : It would normally match all characters except newline character. Re.DOTALL – matches all characters including newline character

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

A :X drummers, X pipers,five rings, X hen

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

A :it helps to add white spaces and 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)

A : 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)

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

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.'

A :re.compile(r'(Alice|Bob|Carol)\s(eats|pets|throws)\s(apples|cats|baseballs)\.', re.IGNORECASE)