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

Re module. We have to import re module.

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

To avoid the special properties of characters.

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

It will returns an object with the span of searched pattern and with matched value

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

By using group()

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?

Group 0 covers 3 digits, group 1 covers 3 digits and group 2 covers 4 digits.

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?

By adding “\” character before parentheses and period

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

When you search for single pattern, it will return list of strings. But when you are search for partition in patterns, then it will return list of tuples with strings.

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

or operation

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

Either first character or second character

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

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

{4} matches exactly 4 characters and {4,5} matches either 4 or 5 characters

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

\d means any digit,\w means any character and \s any white space character.

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

\D means not digit,\W means not character \S non white space character

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

No difference

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

[0-9a-z]

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

re.IGNORECASE

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

Match will search the pattern from starting. When we pass re.DOTALL, then . will capture any character includes newline character also.

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

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

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)

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)

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.'