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

Ans: first import re

And after that you have to specify what kind of operation you want

Ex: x = re.search("^The.\*Spain$", txt)

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

Ans : because **so that backslashes do not have to be escaped**

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

Ans: return the first value which is matched from the string

The re.search() method returns a Match object ( i.e.,re.match). This match object contains the following two items.

1. The tuple object contains the start and end index of a successful match.
2. Second, it contains an actual matching value that we can retrieve using a group() method.
3. From a Match item, how do you get the actual strings that match the pattern?

Ans : using a group() method.

* The *match() method*attempts to match regular expression pattern with the entered string.
* The groups() method thus returns the tuple of matched groups.

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 🡪 return entire number (EX : 123-456-789)

group 1 🡪 return (EX: 123)

Group 2 🡪 return (EX:456-789)

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

Ans : reutnr all the matching as List

1. In standard expressions, what does the | character mean?
2. Ans :  matches either the regular expression preceding it or the regular expression following it

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

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

Ans : + 🡪  matches 1 or more characters in front of the plus

\* 🡪 matches 0 or more characters in front of the asterisk

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

Ans :

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

Ans : **\d** Backslash and d, matches digits 0 to 9, equivalent to [0-9]

**\w** Backslash and w, it is equivalent to [a-zA-Z0-9\_], matches

\s  matches whitespace (spaces, tabs, and newlines)

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

Asn : \D returns where string does not contain the digit

\W returns where string does not contain the word

\S returns where string does not contain white spaces

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

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

Ans : \w return numbers and lowercase letters with a character class

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

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

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.'