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

re.compile() generates reges objects

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

to not escape backslashes

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

match object

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

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 : entire match

Group 1 : first set fo parameters

Group 2 : second set of parameters

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?

using backslash

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

No groups - list of strings

at least one group - list of tuple

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

match between two entities

9. In regular expressions, what does the character stand for? -- Not getting

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

+ is for at least one or more but \* is for 0 or more

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

4 is for only 4 match but 4,5 is for four and 5 match

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

match for a digit - \d

match for a digit - \w

match for a digit - \s

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

match for a digit - \D

match for a digit - \W

match for a digit - \S

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? - [0-9][0-9]|[a-z][a-z]

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

use re.IGNORECASE

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

. means one character except newline(\n).

any character

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

numRegex is not defined - Error

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

re.VERBOSE allows whitespace and comments to the string to pass re.compile()

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)

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)

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.'

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