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

Ans: The re.compile() function returns Regex objects.

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

Ans: Raw strings are used so that backslashes do not have to be escaped.

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

Ans: The search() method returns Match objects.

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

Ans: The group() method returns strings of the matched text.

5. In the regex which created from the $r'(\d\d)-(\d\d)-(\d\d)$, what does group zero cover? Group 2? Group 1?

Ans: Group 0 is the entire match, group 1 covers the first set of parentheses, and group 2 covers the second set of parentheses.

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?

Ans: Periods and parentheses can be escaped with a backslash: \., \(, and \).

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

Ans: If the regex has no groups, a list of strings is returned. If the regex has groups, a list of tuples of strings is returned.

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

Ans: The | character signifies matching "either, or" between two groups.

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

Ans: The ? character can either mean "match zero or one of the preceding group" or be used to signify nongreedy matching.

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

Ans: The + matches one or more. The * matches zero or more.

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

Ans: The {4} matches exactly four instances of the preceding group. The {4,5} matches between four and five instances.

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

Ans: The \d, \w, and \s shorthand character classes match a single digit, word, or space character, respectively.

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

Ans: The \D, \W, and \S shorthand character classes match a single character that is not a digit, word, or space character, respectively.

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

Ans: The . performs a greedy match, and the .? performs a nongreedy match.

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

Ans: Either [0-9a-z] or [a-z0-9]

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

Ans: Passing re.I or re.IGNORECASE as the second argument to re.compile() will make the matching case insensitive.

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

Ans: The . character normally matches any character except the newline character. If re.DOTALL is passed as the second argument to re.compile(), then the dot will also match newline characters.

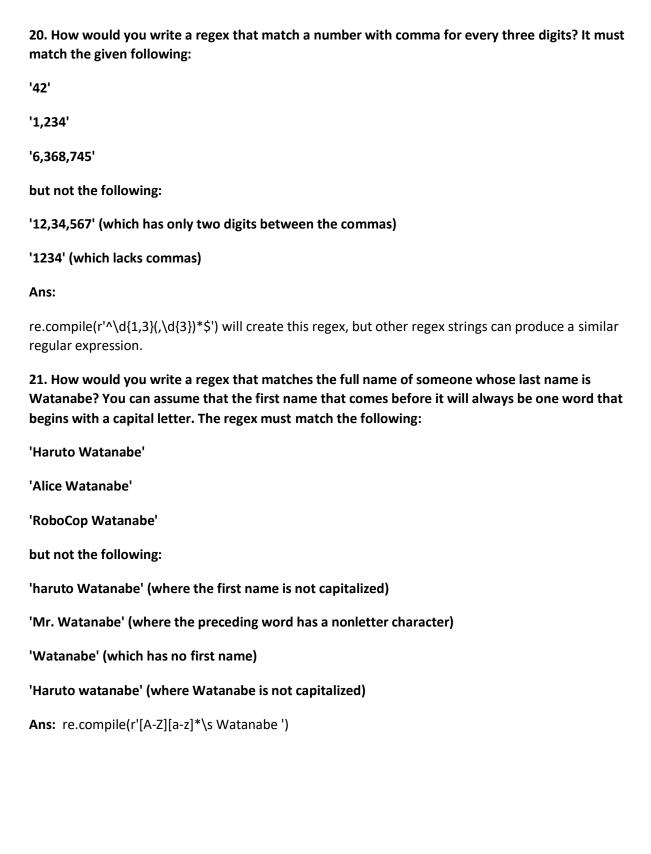
18. If numReg = re.compile($r'\d+'$), what will numRegex.sub('X', '11 drummers, 10 pipers, five rings, 4 hen') return?

Ans: 'X drummers, X pipers, five rings, X hens'

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

Ans:

The re.VERBOSE argument allows you to add whitespace and comments to the string passed to re.compile().



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

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