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

**Ans**. The re.compile() function is to generate regex objects.

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

**Ans**. Raw string are used so that backslashes do not have to be escaped.

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

**Ans**. It is returning match object and implies that first match found at index.

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

**Ans**. The group() return the string of the matched text.

**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?

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

**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 parenthesis cn be escaped with backslashes \., /(, 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 string is returned. If the regex has group a list of tuple of string is returned.

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

**Ans**. It signifies “either” or between the groups.

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

**Ans**.Each character in a regualr expression, is either a metacharacter, having a special meaning, or regular character that has a literal meaning.

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

**Ans**. The ‘+’ matches one and more, the ‘\*’ matches zero and more.

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

**Ans**. {4} Matches exactly four instances of preceeding groups. The {4,5} matches 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 matches a single digit, word and special character respectively signify in regular expressions.

**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 matches a single character that is not digit, word and special character respectively signify in regular expressions.

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

**Ans**. .\*? is non greedy. \* will match nothing but then try to match extra character until it matches 1 eventually matching 101.

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

**Ans**. Either[0-9a-z] or [a-z0-9]

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

**Ans**. Passing re.l 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 match any character except newline character. If re.DOTALL is passed as the second argument to re.compile(), then 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, hen

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

**Ans**. re.VERBOSE allows you to add comment and whitespace to the string passed to 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)

**Ans**. Re.compile(r’^\d{1,3}(,\d{3}\*$’) will create this regex, but other regex string can produce a similar regular expressions.

**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)

**Ans**. Re.compile(r’[A-Z][a-z]\*\hWatanabe’)

**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.'

**Ans**. Re.compile(r’Alice|Bob|Carol)\s(eats|pets|throws)\s(apples|cats|baseballs)\.’re.IGNORECASE)