Assignment -

- 1A. re.compile() returns regex objects
- 2A. Raw strings are used so that backslashes do not need to be escaped
- 3A. Matched objects
- 4A. group() returns string of matched text
- 5A. Group 0 is the entire match, group 1 covers the first set of parentheses, and group 2 covers the second set of parentheses.
- 6A. Periods and parenthesis can be escaped by $\,\,\(,\)$
- 7A. If groups are not there, then list of strings is output, else list of tuples of strings will be the output
- 8A. | means either / or
- 9A. ? means match 0 or one of the preceding groups
- 10A. + is concatenation, * means replication. + also means one or more, * means 0 or more
- 11A. {3} means match 3 groups, {3,5} means match 3 to 5 groups
- 12A. \d,\w\s means match digit, word or string
- 13A. \D\W\S means don't match digit, word or string
- 14A. .*? means after . few characters. *.? Means few characters before the dot and single char after dot. Dot (.) performs greedy match and (.?) performs non greedy match
- 15A.
- 16A. Passing re.I or re.IGNORECASE as the second argument to re.compile() will make the matching case insensitive.
- 17A. 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.
- 18A. X drummers, X pipers, five rings, X hens
- 19A. The re.VERBOSE argument allows you to add whitespace and comments to the string passed to re.compile().

20A. re.compile(r'^\d{1,3}(,\d{3})*\$') will create this regex, but other regex strings can produce a similar regular expression.

21A. re.compile(r'[A-Z][a-z]*\sNakamoto')

 $22A.\ re.compile(r'(Alice|Bob|Carol)\s(eats|pets|throws)\s(apples|cats|baseballs)\.', re.IGNORECASE)$