1. What is the difference between enclosing a list comprehension in square brackets and parentheses?

**Ans:** Square brackets are lists while parentheses are tuples. A comma must be included in a tuple even if it contains only a single value. e.g. (1,) instead of (1).

1. What is the relationship between generators and iterators?

**Ans:** An iterator in Python serves as a holder for objects so that they can be iterated over; a generator facilitates the creation of a custom iterator.

1. What are the signs that a function is a generator function?

**Ans:** A generator is a special type of function which does not return a single value, instead, it returns an iterator object with a sequence of values. In a generator function, a yield statement is used rather than a return statement.

1. What is the purpose of a yield statement?

**Ans:** Yield is a keyword in Python that is used to return from a function without destroying the states of its local variable and when the function is called, the execution starts from the last yield statement. Any function that contains a yield keyword is termed as generator.

1. What is the relationship between map calls and list comprehensions? Make a comparison and contrast between the two.

**Ans:** List comprehension is more concise and easier to read as compared to map. List comprehension are used when a list of results is required as map only returns a map object and does not return any list. Map is faster in case of calling an already defined function (as no lambda is required).