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

ANS:

The difference is that a generator is defined using parentheses, while list comprehensions are defined using square brackets.

2) What is the relationship between generators and iterators?

ANS:

Iterators are the objects that use the next() method to get the next value of the sequence. A generator is a function that produces or yields a sequence of values using a yield statement.

3) What are the signs that a function is a generator function?

ANS:

We can only tell it's a generator function by the presence of a yield statement. A yield statement turns a regular function into a generator function.

4) What is the purpose of a yield statement?

ANS:

The yield statement returns a generator object to the one who calls the function which contains yield, instead of simply returning a value.

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

ANS:

List comprehension returns a list, whereas the map function returns an object of Iterable. List comprehension execution is faster than that of map function when the formula expression is huge and complex.