

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

- List comprehension in square brackets gives a list as an output whereas list comprehension in parentheses creates a generator object.

2) What is the relationship between generators and iterators?

- A python iterator and generator both fetch information from the predefined libraries. They help in the proper conduct of the code.

- Generators write fast and compact code/ Iterator writes custom and long codes.

- Iterators are implemented using a class and a local variable for iterating is not required here.

- Generators are implemented using a function.

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

- Generator function contains one or more yield statements.

- When called, it returns an object (iterator) but does not start execution immediately.

4) What is the purpose of a yield statement?

- A yield statement looks much like a return statement, except that instead of stopping execution of the function and returning, yield instead provides a value to the code looping over the generator and pauses execution of the generator function.

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

- 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.

- Map function is faster than list comprehension when the formula is already defined as a function earlier. So, that map function is used without lambda expression.