

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

If the list comprehension enclosed in square brackets it becomes list, if it is enclosed by parentheses it becomes tuple.

2) What is the relationship between generators and iterators?

Iterators are used mostly to iterate or convert other objects to an iterator using iter() function. Generators are mostly used in loops to generate an iterator by returning all the values in loop without affecting the iteration of the loop.

Every iterator is not a generator. But Every generator is an iterator.

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

If a function contains at least one yield statement or it may contain other yield or return statements, it becomes a generator function.

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 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.