

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

Solution – List comprehension is enclosed in square brackets, whereas a generator expression is enclosed in parentheses.

- 2) **What is the relationship between generators and iterators?**

Solution - 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?**

Solution - 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?**

Solution - 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.**

Solution - 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.