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

**Ans:** A List Comprehension, just like the plain range function, executes immediately and returns a list. The difference between the two kinds of expressions is that the List comprehension is enclosed in square brackets [] while the Generator expression is enclosed in plain parentheses ().

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

**Ans:** 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 the loop without affecting the iteration of the loop

**3) 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.

**4) What is the purpose of a yield statement?**

**Ans:** In its simplest form, 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.**

**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)