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

parentheses?

Ans: Generally, parentheses () are used for grouping expressions, defining functions or passing arguments, and defining tuples. Square brackets [] are used for creating lists, indexing elements and slicing snippets.

2) What is the relationship between generators and iterators?

Ans: Iterators are primarily used to iterate through other objects or convert them to iterators using the iter() method. Generators are commonly used in loops to create an iterator by returning all the data without impacting the loop's iteration. Iterator makes use of the iter() and next() methods.

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 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).