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

parentheses?

Ans:

When List Comprehension’s square brackets is replaced with parentheses, it becomes a generator, thus the output of the code behaves differently. The later initializes an object & when iterated, allocates memory & produces output, thus saves memory. While in list comprehension, memory is allocated for the outcome.

2. What is the relationship between generators and iterators?

Generators are those iterators which can be iterated only once & produces the result, for creating iterators we use generators. issubclass function gives True that means Generators are inherited from the iterator classes. Also for generators we can iterate both through for loop &Next keyword.

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

Generator function uses function with yield keyword.

4. What is the purpose of a yield statement?

Yield statement will convert the function into iterator, though the object returned is generator object. secondly Yield keyword will return output with respect to all the iterations thus saving local variable values.

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

contrast between the two.

List Comprehension is used to return a list of elements as a results, while map returns an object. List Comprehension is comparatively easier to understand & read than map.