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

***List comprehension is enclosed in square brackets [] while the Generator expression is enclosed in plain parentheses ().***

***A List Comprehension, just like the plain range function, executes immediately and returns a list.***

***A Generator Expression, just like xrange returns an object that can be iterated over.***

***In an object returned by the generator expression, we cannot access an element by index.***

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

***Both iterables and generators produce an iterator, and there is no necessity keeping track where we are in the stream, how to get to the next item, how to stop iterating, etc.***

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

***Defined like a normal function.***

***Generates a value with the yield keyword rather than return.***

***The yield statement suspends function’s execution and sends a value back to the caller.***

***Enable function to resume where it is left off. When resumed, the function continues execution immediately after the last yield run.***

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

***Yield is generally used to convert a regular function into a generator***

***used to return from a function without destroying the states of its local variable and when the function is called, the execution starts from the last yield statement***

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

#### *Map VS List Comprehension*

* ***List comprehension is more concise and easier to read as compared to map.***
* ***List comprehension allows filtering.Map, don’t have such facility.List comprehension is used when a list of results is required***
* ***as map only returns a map object and does not return any list.***
* ***List comprehension is faster than map when we need to evaluate expressions that are too long or complicated to express***
* ***Map is faster in case of calling an already defined function***