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

# Square brackets are lists while parentheses are tuples.

1. What is the relationship between generators and iterators?

# 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. Classes are used to Implement the iterators. Functions are used to implement the generator.

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

# If a function contains at least one yield statement (it may contain other yield or return statements), it becomes a generator function.

1. What is the purpose of a yield statement?

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.

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

# 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