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

**Answer : Square Brackets vs. Parentheses:** Square brackets create a list, evaluating all elements at once; parentheses create a generator, evaluating elements lazily as needed.

1. What is the relationship between generators and iterators?

**Answer : Generators and Iterators:** Generators are a type of iterator that generate values on the fly using yield.

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

**Answer : Signs of a Generator Function:** Contains yield, returns a generator object, and pauses/resumes execution.

1. What is the purpose of a yield statement?

**Answer : Purpose of yield:** Produces a value and pauses the function, allowing it to resume later.

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

**Answer : map vs. List Comprehensions:**

* map applies a function to each item and returns an iterator.
* List comprehensions are more readable, flexible, and can include conditions.
* Both can be used to transform iterables, but list comprehensions are more Pythonic.