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

They are 2 different expressions; first one is list which is mutable and we can change the content and the second one is tuple which is not mutable and it is a generator expression

1. What is the relationship between generators and iterators?

Iterator is an object with countable number of member and we can it to iterate over an iteratable object such as list, set , … for creating iterable w can use iter() ad for moving through it we can use next()

Generator mostly use in function to make an iterator, for calling next member we should use yield

All generators are iterator but all iterators are not generator

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

Instead of using return keyword for returning outputs, we should use yield

1. What is the purpose of a yield statement?

It is used to return outputs of a function without destroying the state of its local variables

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

Map gets a function and a list as input arguments, then go through list members and run function for each and every one.

List comprehension is easier to understand as map

List comprehension use when a list of result is required while map return a map object

Map is faster in case of calling than list comprehension