1. What is the relationship between def statements and lambda expressions ?

Ans =>lamda is a inline function where we can do any functionality without adding function name but in def statement we have to pass function name.

2. What is the benefit of lambda?

Ans=>The lambda keyword in Python provides a shortcut for declaring small anonymous functions

3. Compare and contrast map, filter, and reduce.

Ans =>

Map applies a function to all the items in an input\_list.

filter creates a list of elements for which a function returns true

Reduce is a really useful function for performing some computation on a list and returning the result

4. What are function annotations, and how are they used?

Ans=> Function annotations provide a way of associating various parts of a function with arbitrary python expressions at compile time

5. What are recursive functions, and how are they used?

Ans=>

a function can call other functions. It is even possible for the function to call itself. These types of construct are termed as recursive functions.

6. What are some general design guidelines for coding functions?

Ans=> Indentation,Maximum Line Length,Should a Line Break Before or After a Binary Operator?,Blank Lines

7. Name three or more ways that functions can communicate results to a caller.

Ans=>

calling Nested Function, simple function calling,Functions as First-Class Objects