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

ANS:

The def keyword is used to define normal functions, while the lambda keyword is used to define anonymous functions.

2. What is the benefit of lambda?

ANS:

Lambda enables us to use functions with pre-trained machine learning (ML) models to inject artiﬁcial intelligence into applications more easily.

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

ANS:

Both map and reduce have as input the array and a function you define. They are in some way complementary: map cannot return one single element for an array of multiple elements, while reduce will always return the accumulator you eventually changed.

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

ANS:

Function annotations are some random expressions which are written with the functions, and they are evaluated at compile time.

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

ANS:

A recursive function is a function in code that refers to itself for execution. Recursive functions can be simple or elaborate. They allow for more efficient code writing, for instance, in the listing or compiling of sets of numbers, strings or other variables through a single reiterated process.

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

ANS:

Coding rules and guidelines ensure that software is:

* Safe: It can be used without causing harm.
* Secure: It can't be hacked.
* Reliable: It functions as it should, every time.
* Testable: It can be tested at the code level.
* Maintainable: It can be maintained, even as your codebase grows.

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

ANS:

AWS removes the complexity of building, training, and deploying machine learning models at any scale.