1. Why are functions advantageous to have in your programs?

**Answer 🡺 Functions have many advantageous in program**

**1 ) Functions allows us to write code once and use it multiple times throughout the program and also it makes program more efficient and easier to understand**

**2 ) Functions are more manageable it makes code to easier to maintain**

**3) Functions can be tested in isolation makes it easier to identify and fix bugs**

**4) Also, there are inbuild functions in python which makes programming so easy with out functions it will be so hard to code**

2. When does the code in a function run: when it’s specified or when it’s called?

**Answer 🡺 The code in a function runs only when the function is called**

**When we define a function, it does not execute itself unless we call the function, we create a block of code**

**For example,**

**def print1():**

**Print(“hello”) # here it has been specified**

**We need to call a function by using its name**

**print1() #now it’s been called and it will execute the function**

3. What statement creates a function?

**Answer 🡺 in Python, the “def’ statement is used to create a function**

**‘def’ statement followed by the function name, and () and colon. And body**

**Example:**

**def print1():**

**Print(“hello”) # here it has been specified**

4. What is the difference between a function and a function call?

Answer 🡺 **A function is block of code that we create to performs a specific task when we want**

**A function call on the other hand, is a statement that used to invoke the function and causes it to execute its code**

**Example**

**def print1():**

**Print(“hello”) # here it has been specified**

**print1() #now it’s been called and it will execute the function**

5. How many global scopes are there in a Python program? How many local scopes?

**Answer 🡺 There is only one global scope and only one local scope in python**

**The global scope includes variables or functions defined outside of functions while local scope includes variables or functions defined within functions**

**Local scope is created each time a function is called and only exists within that function.**

6. What happens to variables in a local scope when the function call returns?

**Answer 🡺 When a function call returns the local scope of that function is destroyed, and any variables that were defined within that function are lost.**

**The values of any variables that were created within the local scope and returned from the function can be used outside of the function**

7. What is the concept of a return value? Is it possible to have a return value in an expression?

**Answer 🡺 The return value is the value that is returned by the function after it has finished execution.**

**It is possible to have a return value in an expression and it can be used in other expressions and statements.**

8. If a function does not have a return statement, what is the return value of a call to that function?

**Answer 🡺 If function does not have return statement, return value of call to that function is None.**

9. How do you make a function variable refer to the global variable?

**Answer 🡺 To make a function variable refer to the global variable we can use the global keyword before the variable name inside the function.**

10. What is the data type of None?

**Answer 🡺 The data type of None is NoneType It is used to represent the absence of a value, and is often used as a default return value for functions**

11. What does the sentence import areallyourpetsnamederic do?

**Answer 🡺 The sentence import areallyourpetsnamederic does not do anything It is not a valid Python module or package, so trying to import it would result in an error.**

12. If you had a bacon() feature in a spam module, what would you call it after importing spam?

**Answer 🡺 After importing spam module, you can call bacon() using the syntax spam.bacon().**

13. What can you do to save a programme from crashing if it encounters an error?

**Answer 🡺 To save a program from crashing if it encounters an error, you can use exception handling techniques such as try and except blocks.**

14. What is the purpose of the try clause? What is the purpose of the except clause?

**Answer 🡺 The try clause is used to enclose block of code that may raise exception. If exception is raised, control is transferred to the except clause, which handles the exception and allows the program to continue running.**