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

**Answer:**

**Following are the advantages of the function in program:**

**Improves readability by dividing program into small independent modules**

**Improves the flow of execution**

**Reduce repeatability of code**

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

**Answer:**

**When it gets called.**

3. What statement creates a function?

**Answer:**

**Syntax of the function contains a header and body.**

**Header statement of the function creates the function.**

**Ex. def function\_name(arg1, arg2…): #Header statement**

**Function definition……. #Function Definition**

**Function definition…….**

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

**Answer:**

**A function is a block of code that performs a specific task when executed.**

**A function call is the act of invoking or executing a function to perform its specified task.**

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

**Answer:**

**Global Scope: Complete program**

**Local Scope: Function in which a variable is defined**

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

**Answer:**

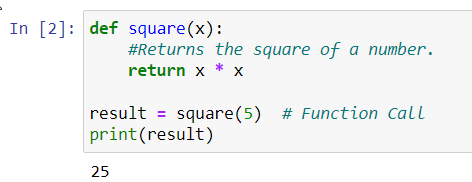
**As input for the function is given through argument of the function, which will be assigned to local variables defined inside the function, which will get destroyed once the function terminates and returns the value.**

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

**Answer:**

**Return value is the output of the function call and execution for that call. Once the function execution completes and it gets terminated then return statement will copy the return value to the statement which called that function.**

**Ex.**

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**Expressions don't have their own return statements. However, they evaluate to a value, which becomes the value of the expression itself. This value can be used in contexts where a return value is expected, like function calls or assignments.**

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

**Answer:**

**If function definition is not having any return statement then return value of a call to that function is none irrespective of function definition.**

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

**Answer:**

**Declare any variable as global at the top of the program and access it inside the function block with use of keyword ‘global’ as shown below,**

x = 10 # Global variable

def function\_name():

global x

10. What is the data type of None?

**Answer:**

**Datatype of the None value is ‘NoneType’**

11. What does the sentence import areallyourpetsnamederic do?

**Answer:**

**It will try to import the module name areallyourpetnamederic from the library which were already install using pip install library name. Since given name is not standard one, so may be library is third party.**

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

**Answer:**

**This function can be called using spam. bacon().**

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

**Answer:**

1. **By the methods of exception handling we can save program from crashing. Like try and except block, using common python exceptions.**
2. **Check for inputs and datatype of the variables**
3. **Debugging of the code before execution for prior sanitation of the code.**
4. **Testing of the code**

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

**Answer:**

**Purpose of the try:**

1. Encloses code that might raise exceptions
2. Attempts normal execution
3. Pauses execution on exceptions

**Purpose of the clause:**

1. Catches and handles exceptions
2. Prevents program crashes
3. Allows for graceful recovery