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

Functions helps to avoid the same block of code getting repeated inside the same program. This makes program shorter, and easier to read and update.

Once a function is defined it can be called so many times within the program.

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

The code in a function runs when it's called not when the function is defined.

**3. What statement creates a function?**

"def" keyword followed by a function name creates a function in python.

e.g., "def sum:" is a function definition with a function name of sum.

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

A function is a block of code which helps to enhance the code reusability, which means we don't want to write the same block of code again and again.

A function call is defined as calling the declared or defined function. The code in a function runs when it's called. Without function call, there is no use of function definition.

Function definition getting memory allocation only when function is called.

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

Global scope occurs when we create a variable outside the function. This value remains unchanged.

Local scope occurs when we create a variable inside the function.

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

Local scope occurs when we create a variable inside the function. It has been allocated memory when the function is called and once function call returns that means function execution ends the variables gets out of scope. it gets deleted from the memory.

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

return statement inside the function sends the results back to the caller. An explicit return statement inside the function immediately terminates a function execution and sends the return value back to the caller code.

we can use a return value in an expression.

def sum(a,b): #----->Function definition,

return a+b #---->return value in an expression.

x=sum(2,2) #--->Function call.

if we print x the result will be 4.

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

if we don't explicitly use return statement inside the function, it uses None as a return value.

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

When a variable is decalred inside the function, it will be defined as local variable. To make a global variable inside the function, we have to use the keyword global.

**10. What is the data type of None?**

None is a datatype of its own(NoneType). None keyword is used to define a null value or no value at all.

**11. What does the sentence import areallyourpetsnamederic do?**

The import statement imports a module named areallyourpersnamederic.( But there is no module named areallyourpetsnamederic in python).

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

We can call it using spam.bacon().

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

If an error occurs in an program, we don't want the program to crash on the user. To save a program from crashing we can use error handling or exception handling.

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

Try and Except statements used to handle the errors within our code in python.

try: the code with the exception(s) to catch. If an exception is raised, it jumps straight into the except block

except: this code is only executed if an exception occured in the try block. The except block is required with a try block, even if it contains only the pass statement.