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

**Ans-**

Advantages of functions:

Avoid duplication and repetition of codes

Improve clarity and readability into simpler ones.

Reduces chances of error

Ease out modification of program

Information hiding

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

**Ans-**

The code inside a function is not executed when the function is defined. The code inside a function is executed when the function is invoked it is common to use the term “call a function” instead of “invoke a function”.

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

**Ans-**

Define a function with def keyword, then write the function identifier(name)followed by parentheses and a colon.

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

**Ans-**

A function is a piece of code which enhanced the reusability and modularity of your program. It means that piece of code need not be written again.

A function call means invoking or calling that function. Unless a function is called there is no use of that function.

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

**Ans-**

The scope of a variable in python is that part of the code where it is visible.

Four types of scopes in python

1 Local scope- variables declared inside function can only be utilized inside the function

2 Global scope- variables declared outside any other python variable scope and hence can be utilized any where in the program

3 Enclosed scope- variable which are not global or local, ex:

>>> def red ():

a=1

def blue ():

b=2

print(a)

print(b)

blue ()

print(a)

>>> red ()

In this code, ‘b’ has local scope in function ‘blue’, and ‘a’ has nonlocal scope in ‘blue’

4 built in scope – the built in scope has all the names that are loaded into python variable scope when we start the interpreter.

Ex: print (), id ()

There are 1 global scope and 4 local scopes in python program.

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

**Ans-**

When a function returns, the local scope is destroyed, and all the variables in it are forgotten.

The local variables are destroyed when the function call returns and memory occupied by them

Are freed for any other variables

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

**Ans-**

A return statement causes execution to leave the current subroutine and resume at the point in the code immediately after the instruction which called the subroutine, know as its return address. Yes, it is possible to have a return value in an expression,

Ex:

>>>def greater\_than\_1(n):

…return n > 1

…

>>>print(greater\_than\_1(1))

False

>>>print(greater\_than\_1(2))

True

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

**Ans-**

If there is no return statement for a function, its return value is None.

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

**Ans-**

When you create a variable inside a function, that variable is local, and can only be used inside that function. To create a global variable inside a function, you can use the global keyword.

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

**Ans-**

The none keyword is used to define a null value, or no value at all. None is not the same as 0, false, or an empty string. None is a data type of its own (None Type) and only None can be none

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

**Ans-**

This statement imports a module named “areallyourpetsnamederic”

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

**Ans-**

By using spam.bacon()

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

**Ans-**

Prevents program from crashing if an error occurs

If an error occurs in a program, we don’t want the program to unexpectedly crash on

the user. Instead, **error handling can be used to notify the user of why the error occurred**

**and gracefully exit the process that caused the error**

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

**Ans-**

The try block is used to check some code for errors

The code inside the try block will execute when there is no error in the program

Whereas the code inside the except block will execute whenever the program encounters some error in the preceding try block

.

.