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

we can avoid repetitive codes. Makes the proram more readable. We can also split the programming task into modules, hence making coding effective. We can also debug and find errors more easily and efficiently.

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

function runs when its called

3. What statement creates a function?

def keyboard

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

a function is a module of code to achieve a particular task. def keyword is used to create functions.

a function call is when the defined function is used/called to achieve the task. a function runs when its called.

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

only one global scope.

local scopes are created whenever function is called. so as many function calls you have in the program, that many local scopes you will have.

variables in list comprehensions and try except block also have local scopes.

classes and instances also have local scopes.

so function, class, class instance, list comprehensions, try except blocks have local scopes.

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

local variables get destroyed.

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

a function does operations on variables or arguments and can return a value or object for further operations by other parts of the program. This is called function return value. Function can also not return anything and its then None return type.

expression can be used as return value.

def sum(a,b):

return a+b

here expression a+b is returned as a value when function is called.

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

function with no return statement, it returns None.

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

use global keyword to declare the variable which you want to be global variable because by default function variables have local scope.

10. What is the data type of None?

Nonetype

11. What does the sentence import areallyourpetsnamederic do?

it imports a module named areallyourpetsnamederic

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

if the import statement is like below:

from spam import bacon

then we can just use bacon() function call directly.

else we have to use the namespace with dot operation spam.bacon()

the feature bacon() of spam module is now available in the namespace of the module we are operating in.

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

Exception handling: write the error producing code within try catch block.

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

we write the error prone code in try block. it throws the error when encountered.

except clause catches the error thrown by try clause.

try except code block helps to deal with error producing code without breaking the program into halt. try except block deals with error and moves to next line of code.