**Assignment-3**

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

Answer:- The function is a set of instructions for a specific task. It is advantageous in the programs as, it provides modular programming, it is used for code-reusability and makes program shorter, easier to read and easier to update.

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

Answer:- The function runs only when function is called in the program not when it is defined.

The function is defined in the begining of the code and called when function defintion and function body statements are completed. The following codes are represented to show function definition and it’s called :-

def even(a): #function definition

if a%2==0:

print("even numbers")

else:

print("odd numbers")

even(101) #function call

3. What statement creates a function?

Answer:- The function defintion parts creates function which is given below in the following codes:-

def even(a): #function definition, it also creates function defintion

if a%2==0:

print("even numbers")

else:

print("odd numbers")

even(101) #function call

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

Answer:- There are following difference between function and a function call:-

|  |  |
| --- | --- |
| Function | Function Call |
| A function is a set of instruction to perform specific tasks which consits of the def statement and the code in its def clause. | The function call helps the program to execute the function, and it also evaluates the function’s return value. |

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

Answer:- As per programming convention, there is one global scope, and a local scope is created whenever a function is called.

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

Answer:- The local sope is destroyed when a function call returns, and all the variables in it are forgotten.

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 of function which is evalauted when the function is called.

Yes, like cany value, a return value can be used as part of an expression.

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

Answer:- If a function doesnot hvae a return statement, then return value is None of a call to that function.

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

Answer:- A global statememt will force a variable in a function to to refer the global variable.

10. What is the data type of None?

Answer:- None is class of NoneType data type.

11. What does the sentence import areallyourpetsnamederic do?

Answer:- It will import the statement imports a module named areallyourpetsnamederic.

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

Answer:- The bacon() feature can be called with using two methods such as

Import spam

Spam.bacon()

Or

from spam import bacon

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

Answer:- we will use try clause in a line of code that might cause an error.

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

Answer:- Try clause is used when there could be a potential error in the line of code.

On the other hand, the code that executes if an eoor happens goes in except clause.