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Solutions to Assignment\_3

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

**Ans:**

If a segment of code is expected to be executed multiple times then it is better to make a function containing those segment of code. If we do not use functions then we have to write (copy and paste) same code each time and the program will be difficult to read and maintain.

Suppose if any changes are required to be made in these repetitive block of code then it will be difficult for us to locate all such segment and make same changes everywhere.

If we make a function with these block of code then modifying at one place will do the job and therefore it will much less cumbersome to maintain the code.

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

**Ans:**

The code inside a function runs only when it is called.

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

**Ans:**

The def statement creates a function.

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

**Ans:**

Function is collection of codes intended to perform a particular task which is defined under def statement and function call is invoking / calling that function for execution of the codes which has been written inside that function.

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

**Ans:**

Global scope :- There is only one global Python scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten.

Local Scope : A local scope is created whenever a function is called.

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

Ans:

The variable in local scope is destroyed when the function call returns and all the variables are forgotten.

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

**Ans:**

A function call evaluates to a value which is called return value.

Yes it is possible to have a return value in an expression.

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

**Ans:**

When a function does not have explicit return statement the return value is “None”.

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

**Ans:**

With the help of “Global” statement we make a function variable refer to the global variable.

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

**Ans:**

The data type of None is NoneType.

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

**Ans:**

This will import the module named areallyourpetsnamederic.

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

**Ans:**

We will call as follows:

spam.bacon()

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

**Ans:**

We will write that code which may cause the crash inside “Try” clause.

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

**Ans:**

We may have some code block which may cause program to terminate prematurely or crash. To prevent this, we place this code segment inside try clause.

The code segment inside except clause is executed when the error happens inside the try clause.

In this way program continues to run even if some error happens.