

Assignment 3

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

Ans:- Functions are advantageous for a program because they tend to reduce the efforts and manual work and also are convenient to use. Also a function can be used by anyone as its globally available. They tend to provide more functionality then a normal code.

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

Ans :- When it's called otherwise it remains like an unused part in the code.

3. What statement creates a function?

Ans :- A function is created by def keyword followed by the function name and parameters or arguments to pass if required ex:-

```
def <function_name>(<parameter/arguments>)
```

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

Ans :- A function is simply a block of code which is designed or developed to perform a specific operation

Ex:- **def add(a,b):**
 return a+b

Whereas a function call is something when the function is being called in order to perform the operation for which it was made

Ex:- **add(5+6)**

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

Ans :- For a function only one global scope can be there and for local it can also have one scope in the function. Where as for whole python program as it can have many function so it can have many global and local variable but with one scope relatively

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

Ans :- When the function call returns the variables in a local scope are called and do the things for which they are assigned.

****Example on next page**

```
Ex:- def add(a,b):  
    a=5  
    b=6  
    return a+b
```

So in the local scope it will return the value in such an order till it's not over written

```
Ex :- a=8  
      add(a,4)  
Which will return 12 as a is being overwritten
```

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

Ans :- return in a function returns a NoneType and no it can't return value in an expression as the return type is only NoneType

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

Ans :- If the function does not have a return statement the return value of a call to that function is None as nothing is being returned

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

Ans :- By using the keyword **global**.

10. What is the data type of None?

Ans :- NoneType

11. What does the sentence import areallyourpetsnamederic do?

Ans :- It will import a library/package named areallyourpetsnamederic

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

Ans :- Yes, after calling spam module we can call bacon()

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

Ans :- Use try and except to avoid crashing a programme if it encounters an error

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

Ans :- try clause runs the main code and if it's encounters an error the code is executed by except clause
