

ASSIGNMENT - 3

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

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A function is block of code that is used to perform specific task. The advantages of the functions are-

- (a) Reducing duplication of code.
- (b) Decomposing complex problems in smaller pieces.
- (c) Improving clarity of the code.
- (d) Reuse of code.

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

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Firstly we have to create a function which is able to perform a particular task. After creation whenever we need to perform that same task again, we have to call the function. A function is going to work when we Call it.

3. What statement creates a function?

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To create a function you need to pass below statement-
`def function_name(parameters):`

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

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A function is block of code which is used to perform a specific task.

Ex. `def ADD(a,b):`
`return a + b`

While a function call is code used to pass controls to the functions.

Ex. `C = ADD(4,5)`
Getting the c value as 9.

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

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When the function call has been the executed then the particular task has been done On the basis of local variables. Local variables only works when function call has ask.

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

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When the function is created then it is expected that it should return result of specific task. Hence the return value simply means getting result from the function.

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

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When we create a function without return then it doesn't return anything. Basically it

Execute or calculated everything but it doesn't show us as output.

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

:- Function variables are also known as Local Variables. When we want to make local variable as global variable then we have to simply write global in front of local variable.

```
Ex.    def demo():  
        Global x  
        X = 'awesome'
```

```
demo()  
print(" I am " + X)
```

OUTPUT-

```
awesome  
I am awesome.
```

In this way we can use local variable as local and global both.

10. What is the data type of None?

:- The None is None datatype.

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

:- When we write code using try and except statement then it simply test our code inside the try block and if any error has been created by our code, it will be shown inside the except block.