

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

**Answer:**

It will reduce the duplication and repetition of code block. This makes the program easier to read and update. It works when the function is called.

**Example:**

```
def add(x,y): return x+y  
  
print(add(1,2)) # 3
```

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

**Answer:**

Work when Function can run while call a function.

**Example:**

```
def square(x):          # Function Declaration  
    return x ** 2      # Code Block  
  
print(square(2))       # Function Calling
```

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3. What statement creates a function?

**Answer:**

**def** keyword is used to create a function with specifies the **name** following with **(:)** sign. The "def" call creates the function object and assigns it to the name given. You can further re-assign the same function object to other names.

**Example:**

```
def display(s):  
  
    print(s)
```

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

**Answer:**

The difference between the function and function call is, A function is procedure to achieve a particular result while function call is using this function to achieve that task.

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

**Answer:** Python searches **three scopes**—the local (L), then the global (G), and then the built-in (B)—and stops at the first place the name is found.

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

**Answer:** Access local variable inside the function. When the function called local scope is destroyed.

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

**Answer:** return value concept are used to store the function result in a variable. We can return value in an expression.

**Example:**

```
def is_even(x):  
    if x % 2 == 0:  
        return True  
    else:  
        return False
```

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

**Answer:** None

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

**Answer:** Use **global** keyword to declare which variables are global.

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10. What is the data type of None?

**Answer:**

The None keyword is used to define a null value, or no value at all. None is not the same as 0, False, or an empty string. None is a data type of its own (NoneType) and only None can be None.

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11. What does the sentence `import areallyourpetsnamederic` do?

**Answer:** That import statement **imports a module named areallyourpetsnamederic**.

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

**Answer:** `spam.bacon()`

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

**Answer:** We should use `try...except` on that condition to catch that error to exit the application safely.

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

**Answer:**

**try:** is used to test the code for error.

**except:** handle error

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