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

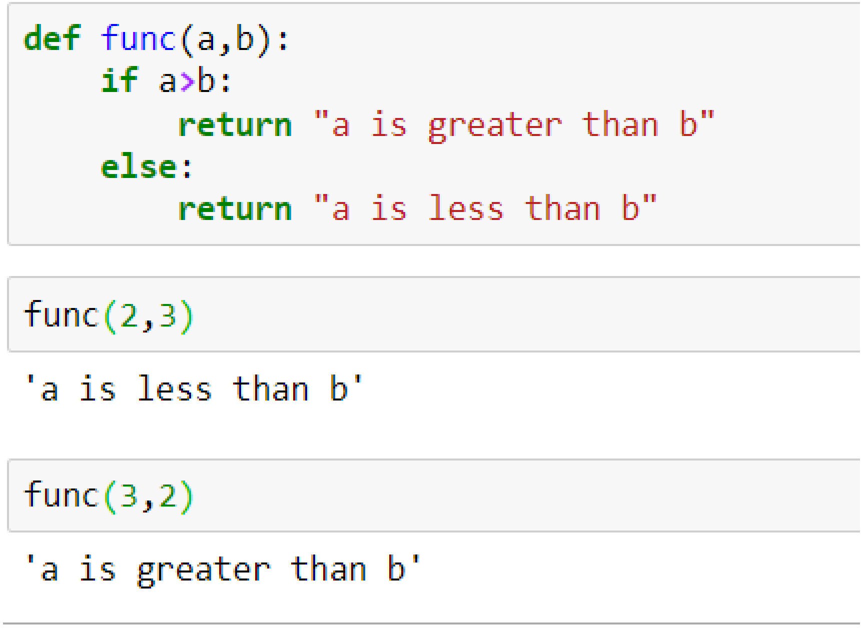
Ans: If we use function we don’t need to write the same code again and again. In a large program it may happen that a small part of the program is repeated in many places. If we put this small code in a function then instead of writing that small code repeatedly we can call the function. This this way program can be more compact and shorter.

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

Ans: The code in a function run only when it is called. It cannot run when it is specified.

3. What statement creates a function?

Ans: def statement create a function.



```
def func(a,b):
    if a>b:
        return "a is greater than b"
    else:
        return "a is less than b"
```

```
func(2,3)
```

```
'a is less than b'
```

```
func(3,2)
```

```
'a is greater than b'
```

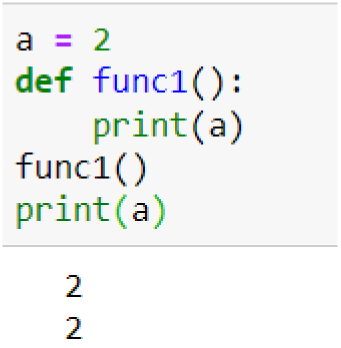
4. What is the difference between a function and a function call?

Ans : Function is used to create by the statement def followed by function name, arguments and function body. It cannot run until and unless it is called.

Function call means passing the arguments into the function to get output.

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

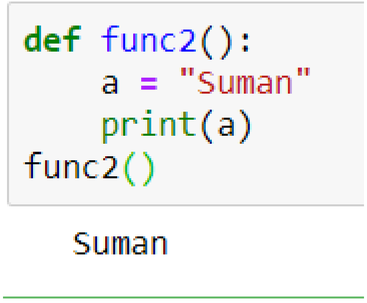
Ans: There are 1 global scope and 1 local scope are there in python



```
a = 2
def func1():
    print(a)
func1()
print(a)
```

```
2
2
```

In the above program a = 2 which is declared outside the function is called global variable.



```
def func2():
    a = "Suman"
    print(a)
func2()
```

```
Suman
```

In the above program a = “Suman” is declared inside the function and it is printed. This is called local variable.

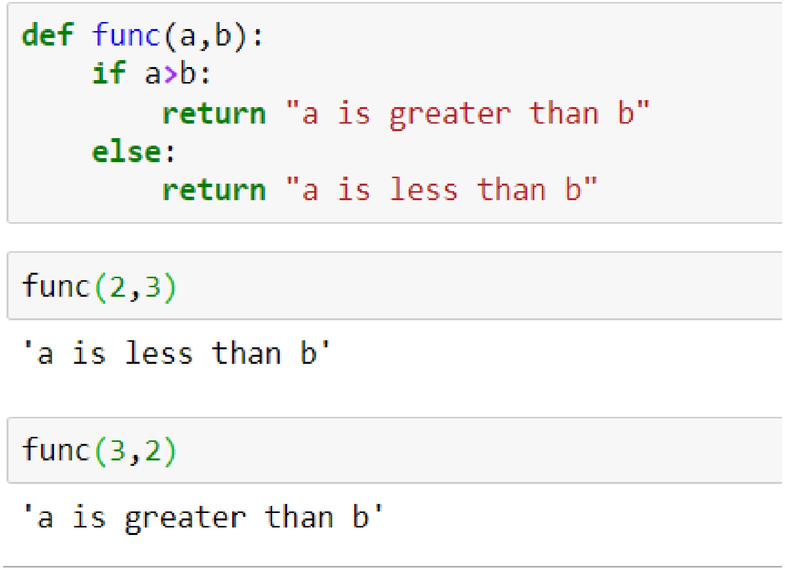
6. What happens to variables in a local scope when the function call returns?

Ans: When function call return all the local variables get destroyed.

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

Ans: Return value is the output of the function when it is called. Yes return value can be a part of expression.

Example



```
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    else:
        return "a is less than b"
```

```
func(2,3)
```

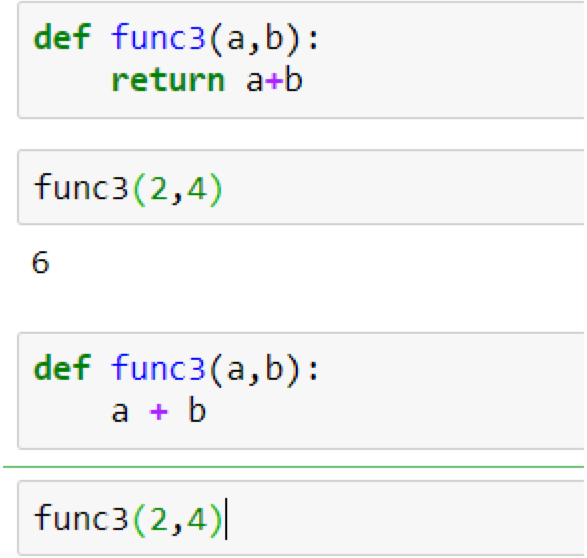
```
'a is less than b'
```

```
func(3,2)
```

```
'a is greater than b'
```

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

Ans : The return value will be None



```
def func3(a,b):
    return a+b
```

```
func3(2,4)
```

```
6
```

```
def func3(a,b):
    a + b
```

```
func3(2,4)
```

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

Ans: A global statement will make a function variable refer to the global variable.

10. What is the data type of None?

Ans: Data type of None is Nonetype

11. What does the sentence import areallyourpetsnamederic do?

Ans: Import statement import a module named areallyourpetsnamederic.

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

Ans: Function can be called as spam.bacon().

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

Ans : If an error occurs in a program, we don't want the program to unexpectedly crash on the user. Error handling can be used to notify the user of why the error occurred and slowly exit the process that caused the error.

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

Ans: Try and Except statement is used to handle the errors within our code in Python. The try block is used to check some code for errors i.e the code inside the try block will execute when there is no error in the program. Whereas the code inside the except block will execute whenever the program encounters some error in the preceding try block.