**Python Functions Exercise**

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### Exercise 1: Create a function in Python

Write a program to create a function that takes two arguments, name and age, and print their value.

### Exercise 2: Create a function with variable length of arguments

Write a program to create function func1() to accept a variable length of arguments and print their value.

**Note**: Create a function in such a way that we can pass any number of arguments to this function, and the function should process them and display each argument’s value.

**Function call**:

# call function with 3 arguments

func1(20, 40, 60)

# call function with 2 arguments

func1(80, 100)

**Expected Output**:

Printing values

20

40

60

### Exercise 3: Return multiple values from a function

Write a program to create function calculation() such that it can accept two variables and calculate addition and subtraction. Also, it must **return both addition and subtraction in a single return call**.

**Given**:

**def** calculation(a, b):

# Your Code

res = calculation(40, 10)

**print**(res)

**Expected Output**

50, 30

### Exercise 4: Create a function with a default argument

Write a program to create a function show\_employee() using the following conditions.

* It should accept the employee’s name and salary and display both.
* If the salary is missing in the function call then assign default value 9000 to salary

**See**: [Default arguments in function](https://pynative.com/python-function-arguments/#h-default-arguments)

**Given**:

showEmployee("Ben", 12000)

showEmployee("Jessa")

**Expected output**:

Name: Ben salary: 12000

Name: Jessa salary: 9000

### Exercise 5: Create an inner function to calculate the addition in the following way

* Create an outer function that will accept two parameters, a and b
* Create an inner function inside an outer function that will calculate the addition of a and b
* At last, an outer function will add 5 into addition and return it

### Exercise 6: Create a recursive function

Write a program to create a **recursive function to calculate the sum of numbers** from 0 to 10.

A recursive function is a function that calls itself again and again.

**Expected Output**:

55

### Exercise 7: Assign a different name to function and call it through the new name

Below is the function display\_student(name, age). Assign a new name show\_tudent(name, age) to it and call it using the new name.

**Given**:

**def** display\_student(name, age):

**print**(name, age)

display\_student("Emma", 26)

You should be able to call the same function using

show\_student(name, age)

### Exercise 8: Generate a Python list of all the even numbers between 4 to 30

**Expected Output**:

[4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28]

### Exercise 9: Find the largest item from a given list

x = [4, 6, 8, 24, 12, 2]

**Expected Output**:

24