```python
"""
Python Functions
Summary By: Varpe K.M.
Reference:
    https://pythonbasics.org/multiple-return/
    https://www.geeksforgeeks.org/g-fact-41-multiple-return-values-in-python/
"""
#In the most simple case you can return a single variable:
def complexfunction(a,b):
    sum = a +b
    return sum

sum=complexfunction(10,20)
print("Sum is",sum)
"""
In Python, we can return multiple values from a function.
Following are different ways
"""
"""
1) Using Object: This is similar to C/C++ and Java,
we can create a class (in C, struct)
to hold multiple values and return an object of the class.
"""
# A Python program to return multiple
# values from a method using class
class Test:
    def __init__(self):
        self.str = "geeksforgeeks"
        self.x = 20

# This function returns an object of Test
def fun():
    return Test()

# Driver code to test above method
t = fun()
print(t.str)
print(t.x)
"""
Output:
geeksforgeeks
20 """

"""
2) Using Tuple:
    A Tuple is a comma separated sequence of items.
    It is created with or without ().
    Tuples are immutable.
"""
# A Python program to return multiple
# values from a method using tuple

# This function returns a tuple
def fun():
    str = "geeksforgeeks"
    x   = 20
    return str, x;   # Return tuple, we could also
                     # write (str, x)

# Driver code to test above method
str, x = fun() # Assign returned tuple
```

```python
print(str)
print(x)
"""
Output:
geeksforgeeks
20 """
"""
Create a function getPerson().
As you already know a function can return a single variable,
but it can also return multiple variables.
We'll store all of these variables directly from the function call.
"""
def getPerson():
    name = "Jhon"
    age = 35
    country = "UK"
    return (name,age,country)

name,age,country = getPerson()
print(name)
print(age)
print(country)
"""
3) Using a list:
    A list is like an array of items created using square brackets.
    They are different from arrays as they can contain
    items of different types.
    Lists are different from tuples as they are mutable."""
# A Python program to return multiple
# values from a method using list

# This function returns a list
def fun():
    str = "geeksforgeeks"
    x = 20
    return [str, x];

# Driver code to test above method
list = fun()
print(list)
"""
Output: ['geeksforgeeks', 20] """

"""
4) Using a Dictionary:
    A Dictionary is similar to hash or map in other languages.
    See this for details of dictionary.
"""
# A Python program to return multiple
# values from a method using dictionary

# This function returns a dictionary
def fun():
    d = dict();
    d['str'] = "GeeksforGeeks"
    d['x']   = 20
    return d

# Driver code to test above method
d = fun()
print(d)
```

```
"""
Output:{'x': 20, 'str': 'GeeksforGeeks'} """
```