



# Python Function





# Dictionary & Function

# Content

- **Dictionary**

Understanding one of data types in Python to store key-and-value data.

- **Function**

Understanding set of instructions bundled together to achieve a specific outcome in Python.

# Python: Dictionary

A dictionary is a collection which is unordered, changeable and indexed. In Python dictionaries are written with curly brackets, and they have keys and values.

```
mydict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
print(mydict)
```

Accessing items:

```
x = mydict["model"]
```

# Python: Dictionary

Change value:

```
mydict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
mydict["year"] = 2018
```

Loop through a dictionary:

```
for x in thisdict:  
    print(x)
```

# Quiz Session



# Quiz

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What is output from this code:

```
mydict = { 'Name': 'Zara', 'Age': 7, 'Class': 'First' }
```

```
mydict['Age'] = 8;
```

```
mydict['School'] = "DPS School"
```

```
print("dict['Age']: ", mydict['Age'])
```

```
print("dict['School']: ", mydict['School'])
```

# Python: Function

A function is a block of code which only runs when it is called.  
You can pass data, known as parameters, into a function.  
A function can return data as a result.

```
def myfunction():  
    print("Hello from a function")
```

Calling a function:  
myfunction()



# Python: Function Parameter (Argument)

Information can be passed into functions as arguments.

Arguments are specified after the function name, inside the parentheses. You can add as many arguments as you want, just separate them with a comma.

```
def myfunction(name):  
    print("Hello " + name )  
  
myfunction("James")
```

# Python: Function Default Parameter

Python allows function arguments to have default values. If the function is called without the argument, the argument gets its default value. The default value is assigned by using assignment(=) operator.

```
def myfunction(name=""):
    print("Hello " + name )
```

```
myfunction("James")
```

# Python: Function Keyword Parameter

You can also send arguments with the key = value syntax.

This way the order of the arguments does not matter.

```
def myfunction(child3, child2, child1):  
    print("The youngest child is " + child3)
```

```
myfunction(child1 = "Emil", child2 = "Tobias", child3 = "Linus")
```

# Python: Function Return Value

To let a function return a value, use the return statement:

```
def myfunction(x):  
    return 5 * x
```

```
print(myfunction(3))  
print(myfunction(5))  
print(myfunction(9))
```

# Quiz Session



# Quiz

---

What is output from this code:

```
def myfunction():  
    x = 10  
    print("Value inside function:", x)
```

```
x = 20  
myfunction()  
print("Value outside function:", x)
```



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