

# Review Python Language

```
my_name = "Toy"  
my_age = 33
```

```
print(my_name)  
print(my_age)
```

Toy  
33

```
print(1+1)  
print(2*2)  
print(5/5)  
print(8-5)
```

2  
4  
1.0  
3

```
# string $ fstring in Python  
my_name = "Toy"  
my_university = 'Kasetsart'  
  
my_long_string = """This is a very long  
This is very long  
This is a Third line """
```

```
print(my_age, my_university, my_long_string)
```

33 Kasetsart This is a very long  
This is very long  
This is a Third line

```
#first string template
my_name = "Toy"
my_age = 33
text = f"my name is {my_name}, and I am {my_age} years old."

print(text)
```

my name is Toy, and I am 33 years old.

```
# function designed for string (string methods)
text = "a duck walks into a bar"
```

```
type(text)
```

str

```
text.upper()
```

'A DUCK WALKS INTO A BAR'

```
text.count("a")
```

4

```
text2 = text.replace('walks', 'run')
print(text)
print(text2)
```

a duck walks into a bar  
a duck run into a bar

```
#list
shopping_list = ['egg', 'milk', 'bread']
print(shopping_list)
```

['egg', 'milk', 'bread']

```
print(shopping_list[0:3])
```

```
['egg', 'milk', 'bread']
```

```
#list method = append  
shopping_list.append('orange juice')  
print(shopping_list)
```

```
['egg', 'milk', 'bread', 'orange juice']
```

```
shopping_list.append('water bottle')  
print(shopping_list)
```

```
['egg', 'milk', 'bread', 'orange juice', 'water bottle']
```

```
# list method .pop()  
shopping_list.pop()  
shopping_list
```

```
['egg', 'milk', 'bread', 'orange juice']
```

```
len(shopping_list)
```

```
4
```

```
# dictionary key-value pair  
student = {  
    "id" : 1,  
    "name" : "Marry",  
    "age" : 22,  
    "movies" : ["Spider Man", "Thor", "Iron Man 3"]  
}
```

```
student['movies'][2]
```

```
'Iron Man 3'
```

```
student['city'] = 'London'  
student
```

```
{'id': 1,  
 'name': 'Marry',  
 'age': 22,
```

```
'movies': ['Spider Man', 'Thor', 'Iron Man 3'],  
'city': 'London']}
```

```
#update Value  
student['city'] = 'Manchester'  
student
```

```
{'id': 1,  
 'name': 'Marry',  
 'age': 22,  
 'movies': ['Spider Man', 'Thor', 'Iron Man 3'],  
 'city': 'Manchester'}
```

```
# remove key-value  
del student['city']  
student
```

```
{'id': 1,  
 'name': 'Marry',  
 'age': 22,  
 'movies': ['Spider Man', 'Thor', 'Iron Man 3']}
```

```
# user-drfined function  
def hello(username):  
    print("Hello! " + username)
```

```
hello("Plume")
```

Hello! Plume

```
def my_sum(val1, val2):  
    print(val1 + val2)  
  
result = my_sum(5,15)
```

20

```
def my_sum(val1, val2):  
    return(val1 + val2)  
  
result = my_sum(5,15)  
print(result)
```

# OOP

## Object Oriented Programing

```
class Dog:
    name = "Toy"
    age = 5
    color = "Brown"
    breed = "French Bulldog"
    # function (Dog method)
    def sitting(self):
        print("I am sitting now!")

    def hungry(self, food_name):
        print(f"I am hungry, I need {food_name}!")
```

```
my_dog = Dog()
type(my_dog)
```

```
__main__.Dog
```

```
my_dog.color
```

```
'Brown'
```

```
my_dog.sitting()
```

```
I am sitting now!
```

```
my_dog.hungry("Pizza")
```

```
I am hungry, I need Pizza!
```