

Basic Python 4 - Function

December 4, 2020

1 Function

```
[ ]: def greet_user():  
    print("Hello!")  
  
greet_user()
```

1.1 Function with input

```
[ ]: def greet_user(username):  
    print("Hello, " + username.title() + "!")  
  
greet_user('jesse')
```

1.2 Positional parameter

```
[ ]: def describe_pet(animal_type, pet_name):  
    print("\nI have a " + animal_type + ".")  
    print("My " + animal_type + "'s name is " + pet_name.title() + ".")  
  
describe_pet('hamster', 'harry')  
describe_pet('harry', 'hamster')
```

1.3 Keyword argument

```
[ ]: def describe_pet(animal_type, pet_name):  
    print("\nI have a " + animal_type + ".")  
    print("My " + animal_type + "'s name is " + pet_name.title() + ".")  
  
describe_pet(animal_type='hamster', pet_name='harry')  
describe_pet(pet_name='harry', animal_type='hamster')
```

1.4 Default values

```
[ ]: def describe_pet(pet_name, animal_type='dog'):  
    print("\nI have a " + animal_type + ".")  
    print("My " + animal_type + "'s name is " + pet_name.title() + ".")
```

```
describe_pet(pet_name='willie')
```

```
describe_pet('willie')
```

1.5 Return value

```
[ ]: def get_formatted_name(first_name, last_name):  
    full_name = first_name + ' ' + last_name  
    return full_name.title()  
  
musician = get_formatted_name('jimi', 'hendrix')  
print(musician)
```

1.6 Examples

```
[ ]: def sumTwoNumbers(num1,num2):  
    output = num1 + num2  
    return output  
  
sumTwoNumbers(10,20)
```

```
[ ]: def howmuch():  
    mywallet = 100  
    pricetag = input('how much is that thing?\n')  
    pricetag = int(pricetag)  
    if mywallet < pricetag:  
        return "Sorry, may be next time."  
    else:  
        return "Could I have one, please."  
  
howmuch()
```

```
[ ]: def append_name(products):  
    outList = []  
    for product in products:  
        outList.append(product+'_added')  
    return outList  
  
a = ['choco', 'coffee', 'milk']  
print(a)  
b = append_name(a)  
print(b)
```

```
[ ]: def guessMyNumber():  
    mynum = 27  
    output = ''  
    while output != 'correct!':  
        print('Please insert your guess.')  
        numguess = int(input())  
        if numguess == mynum:  
            output = 'correct!'  
        else:  
            if numguess < mynum:  
                output = 'Your guess is smaller.'  
            else:  
                output = 'Your guess is larger.'  
        print(output)  
        print('\n')  
    return output
```

```
[ ]: guessMyNumber()
```

```
[ ]:
```