



# PYTHON DAY - 6

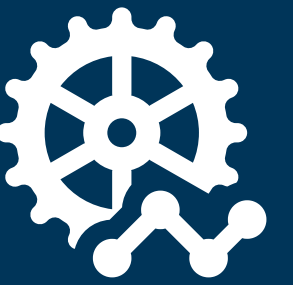




# FUNCTIONS



# FUNCTIONS



- Functions in Python are blocks of reusable code that perform specific tasks
- A function runs only when it is called
- They are defined using the "def" keyword
- They can be called multiple times



# def



```
def hello():  
    print("Hello world!")  
  
hello()
```

# ARGUMENTS



- 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 hello(name):  
    print("Hello" + name)  
  
my_function("sam")  
my_function("Toby")  
my_function("Andrew")
```

# PARAMETERS - ARGUMENTS



```
def my_func(param1, param2):  
  
    # param1 and param2 are parameters  
  
my_func(arg1, arg2):  
  
    # arg1 and arg2 are arguments that replace the  
    parameters in the function
```



# POSITIONAL ARGUMENTS



```
def greetings(name1,name2):  
    print(f"Hello, {name1}, {name2}")  
  
greetings("tom","jerry")
```

# KEYWORD ARGUMENTS



```
def greetings(a,b):  
    print(f"Hello, {a}, {b}")  
  
greetings(a="tom",b="jerry")
```



# DEFAULT PARAMETER VALUE



```
def my_function(country = "India"):  
    print("I am from " + country)  
  
my_function("Sweden")  
my_function("India")  
my_function()  
my_function("Brazil")
```

# RETURN VALUES



```
def my_function(x):
```

```
    return 5 * x
```

```
print(my_function(3))
```

```
print(my_function(5))
```

```
print(my_function(9))
```

# \*ARGS (NON-KEYWORD ARGUMENTS)



```
def multiply(*numbers):  
    total = 1  
    print(numbers)  
    for number in numbers:  
        total*=number  
    return total  
  
multiply(2,3,5,6,7)
```

# \*\*KWARGS (KEYWORD ARGUMENTS)



```
def user_details(**info):  
    print(info)  
  
user_details(name="john", age=25)
```

# LOCAL VS GLOBAL VARIABLE



```
def number():
```

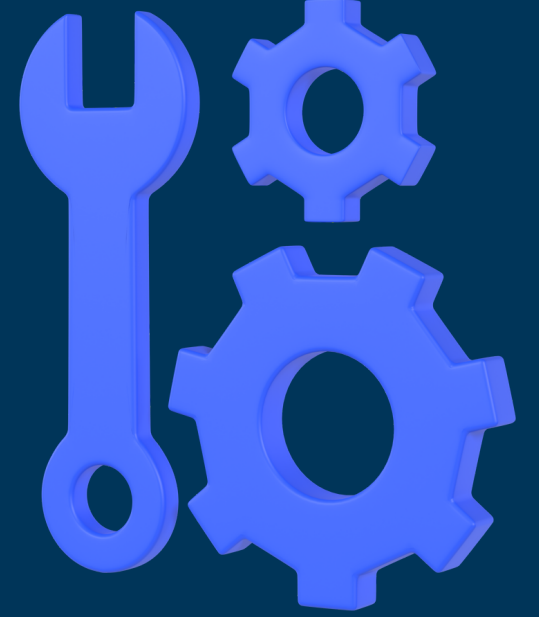
```
    global x
```

```
    x = 5
```

```
number()
```



# LAMBDA







- Lambda functions in Python are small, anonymous, single-expression functions that are defined using the **lambda** keyword
- They are used for quick, throw-away functions that are needed for a short period of time
- syntax:

**lambda arguments: expression**

# LAMBDA



```
x = lambda a : a + 10
```

```
print(x(5))
```

# LAMBDA



```
x = lambda a : a + 10
```

```
print(x(5))
```



```
x = lambda a, b : a * b
```

```
print(x(5, 6))
```



# ASSIGNMENT

1



# ROMAN NUMERALS TO INTEGER



Roman numerals to integer

Roman numerals from user input should be converted into integer values as output

Rules:

1. If the Larger value is written first followed by smaller value, then add those values.

eg: III = 3, XII = 12

2. If smaller is written first followed by larger value, then subtract those values

eg: IV = 4 , CD = 400

I	1
V	5
X	10
L	50
C	100
D	500
M	1000

# EXAMPLE



Number	Expansion	Roman Numeral	1-10 Roman numerals
1	1	I	1 = I
2	1 + 1	II	2 = II
3	1 + 1 + 1	III	3 = III
4	5 - 1	IV	4 = IV
5	5	V	5 = V
6	5 + 1	VI	6 = VI
7	5 + 1 + 1	VII	7 = VII
8	5 + 1 + 1 + 1	VIII	8 = VIII
9	10 - 1	IX	9 = IX
10	10	X	10 = X





# TEST CASES



## Test cases

1. input = "MCMXCIX" ----> output = 1999
2. input = "DCCC" ----> output = 800
3. input = "DCLXXIII" ----> output = 673
4. input = "MMMDCCLXXIV" ----> output = 3724
5. input = "MMMCMXCIX" ----> output = 3999

# SUBMISSION PROCEDURE



PANTECH - Python , Machine & Deep Learning ,  
AI Group

Public group



# SUBMISSION PROCEDURE



#NMAssignment1 #naanmudhalvan #tnsdc #projecthackathon

#python #pantechlearning

@Pantech eLearning

Name:

College:

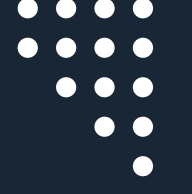
NM code:

Project code:



Comments on

Post



# THANKS FOR WATCHING

