Python Functions – Practice

Need of functions

* Clean code
  + Fix at once place
  + Reusability
  + Readability

Naming Rules

A-Z a-z \_ 0-9

Defining a function

*Simple*

*def* function\_name():

statement(s)/blocks of code

With Arguments

*def function\_name(parameters):*

*statement(s)/blocks of code*

With Return type

def function\_name(parameters):

statement(s)/blocks of code

return expression

Calling a function

function\_name()

or

function\_name (89,78)

or

value = function\_name (89,78)

Types of Function arguments

1. Default argument

# Python program to demonstrate the default arguments

*def* testfunc (x, y=3):

print("x: ", x)

print("y: ", y)

# We call codingal () with only 1 argument)

testfunc (9)

**Output:**  
x: 9  
y: 3

1. Keyword arguments (named arguments)

# Python program to demonstrate Keyword Arguments

*def* PrintTS(teacher, student):

print(teacher, student)

# Keyword arguments

PrintTS (teacher =A, student =B)

PrintTS (student =B, teacher =A)

**Output:**  
A B

1. Positional arguments

*def* subtract(a,b):

return a-b

print(subtract(10,5))

print(subtract(5,10))

**Output:**  
5

-5

1. Arbitrary arguments (variable-length arguments \*args and \*\*kwargs)

Variable length non-keywords argument:

# Python program to illustrate \*args for variable number of arguments

*def* printEverything(\*argv):

for arg in argv:

print(arg)

printEverything ('Hello', 'Welcome', 'to')

**Output:**

Hello

Welcome

to

Variable length keyword arguments:

*def PrintStudent(\*\*kwargs):*

*for key, value in kwargs.items():*

*print("%s == %s" % (key, value))*

*PrintStudent(Name="Saket", Age=10, School="JPP")*

**Output:**

Name == ’Saket’  
Age == 10  
School == ‘JPP’

Practice

1. Find the greater number of given 2 numbers
2. Generate Tables from 2 to 30
3. Conversion of Celsius to Fahrenheit (F = (C \* 9/5) + 32)
4. Calculate area of Rectangle
5. Check if the entered number is a prime number