



Finolex Academy of Management and Technology, Ratnagiri

Department of Information Technology

Subject:	Python Lab. (ITL404)		
Class:	SE IT / Semester – IV (Rev-2016) / Academic year: 2017-18		
Name of Student:	Kazi Jawwad A Rahim		
Roll No:	28	Date of performance (DOP) :	
Assignment/Experiment No:	01	Date of checking (DOC) :	
Title: Program to demonstrate use of Expressions, Variables, Quotes, range, and basic math operations.			
Marks:		Teacher's Signature:	

1. Aim: To understand basics of Python programming.

2. Prerequisites:

1. Basics of programming disciplines.

3. Hardware Requirements:

1. PC with minimum 2GB RAM

4. Software Requirements:

1. Windows / Linux OS.
2. Python 3.6 or higher

5. Learning Objectives:

1. To understand Python as a software development platform.
2. To understand elementary building blocks of Python such as- expressions, variables, quotes, range, and basic math operations.

6. Learning Objectives Applicable: LO 1

7. Program Outcomes Applicable: PO 1

8. Program Education Objectives Applicable: PEO 1

SOURCE CODE:

```
print("Demonstration of quotes")

s1='Hello World'

s2="Internet is not working"

s3=""I asked, "Whose book is it?"

She replied, "It is Wartikar's math book""

print("s1=",s1)

print("s2=",s2)

print("s3=",s3)

print("\nDemonstaration of variable")

a=13

b=5

print("a=",a)

print("b=",b)

print("\nDemonstration of Basic Math Operators and Expressions")

print("a+b=",a+b)

print("a-b=",a-b)

print("a*b=",a*b)

print("a/b=",a/b)

print("a%b=",a%b)

print("a**b=",a**b)

print("a//b=",a//b)

print("a>b=",a>b)

print("a<b=",a<b)

print("a<=b=",a<=b)

print("a>=b=",a>=b)

print("a!=b=",a!=b)

print("a==b=",a==b)

print("\nComposite Operators")
```

```
print("2*a+b=",2*a+b)
print("\nDemonstration of range")
print("range(7)=",list(range(7)))
print("range(2,7)=",list(range(2,7)))
print("range(2,10,2)=",list(range(2,10,2)))
print("range(10,1,-1)=",list(range(10,1,-1)))
print("range(10,1,-3)=",list(range(10,1,-3)))
print("range(1,10,-3)=",list(range(1,10,-3)))
print("range(10,1,2)=",list(range(10,1,2)))
```

OUTPUT:

Demonstration of quotes

s1= Hello World

s2= Internet is not working

s3= I asked, "Whose book is it?"

She replied, "It is Wartikar's math book"

Demonstration of variable

a= 13

b= 5

Demonstration of Basic Math Operators and Expressions

a+b= 18

a-b= 8

a*b= 65

a/b= 2.6

a%b= 3

a**b= 371293

a//b= 2

a>b= True
a<b= False
a<=b= False
a>=b= True
a!=b= True
a==b= False

Composite Operators

2*a+b= 31

Demonstration of range

range(7)= [0, 1, 2, 3, 4, 5, 6]
range(2,7)= [2, 3, 4, 5, 6]
range(2,10,2)= [2, 4, 6, 8]
range(10,1,-1)= [10, 9, 8, 7, 6, 5, 4, 3, 2]
range(10,1,-3)= [10, 7, 4]
range(1,10,-3)= []
range(10,1,2)= []

Learning Outcomes Achieved:

1. Understood Python as software development platform.
2. understood elementary building blocks of Python such as- expressions, variables, quotes, range, and basic math operations.

Conclusion:

Thus we understood the basics of python.

13. Experiment/Assignment Evaluation

SR	Parameters	Weight	Excellent	Good	Average	Poor	Not as per requirement
		Scale Factor ->	5	4	3	2	0
1	Technical Understanding	25					
2	Performance / Execution	25					
3	Question Answers	20					
4	Punctuality	20					
5	Presentation	10					
	Total out of 40 --> #(to be converted as per term-work evaluation applicable to the subject)		$\Sigma (\text{Weight} * \text{Scale Factor}) * 4/50 = \text{.....} / 40$				

References:

- [1] James Payne, "Beginning Python using Python 2.6 and Python 3.1", Wrox Publications.
- [2] Dr. R. Nageswara Rao, "Core Python Programming", Dreamtech Press, Wiley Publications.

Viva Questions

1. What is Python?
2. How is Python different than C/C++?
3. How do you declare variable in Python?
4. What is quotes in Python?
5. What is range in Python?
6. What are different math operations and operators used for it in the Python?