Neeraj Appavi T073

INFORMATION RETRIEVAL
Practical - 01

Aim:-

A] Write a program to demonstrate all bitwise operator

B] Write a program to find the vector of string in given documents.

Description

1] AND- A bitwise AND is a binary operation that takes two equal lenght binary representations and perform the logical AND operation on each pair of the corresponding. bits

2] OR - A bitwise OR is a binary operation that takes two bit patterns of equal lenght and performs logical inclusive OR operation on each pair of corresponding bits

3] XOR - A bitwise XOR is a binary operation to that takes two bit patterns of equal lenght and performs the exclusive OR operation on each pair of corresponding bits

4] Complement - The bitwise complement is also called as one's complement operator as it always takes only one value or an operand

5] left shift - When shifting to the left, the leftmost digit is binary representation of number is lost

(B)

```
def VofStr (t, x):
    print ("Neeraj Appari T073")
    for i in range (0, len(x)):
        if t in x:
            return 1
        else:
            return 0

S1 = [item for item in input ('Enter 1st String:').split()]
S2 = [item for item in input ('Enter 2nd String:').split()]
S3 = [item for item in input ('Enter 3rd String:').split()]
t = str (input ('Enter a word:'))
print ('Vector :' , Vofstr (t, S1), Vofstr (t, S2), Vofstr (t, S3))
```

Output:
Neeraj Appari T073
Enter the val 1 : 8
Enter the val 2 : 2
Bitwise AND Operator: 0
Bitwise OR operator: 10
Bitwise Exclusive OR operator: 10
Bitwise NOT operator on val 1: -9
Bitwise LEFT SHIFT operator on val 1-16
Bitwise RIGHT SHIFT operator on val 2: 1

and 0 is inserted to right most end.

6] Right Shift- A logical right shift of one position move each bit to the right and insert a 0 at the other end.

1 Code - A]

```
def operators():
    print("Neeraj Appani 7023")
    val 1 = int (input ('Enter value of val 1:'))
    val 2 = int (input ('Enter value of val 2:'))
    print ("Bitwise AND Operator on val 1 and val2",
        val 1 & val 2)
    print ("Bitwise OR Operator on val 1 and val2:",
        val 1 & val 2)
    print (Bitwise Exclusive OR operator on val 1 and val2:
        val 1 ^ val 2)
    print ("Bitwise NUT operator on val 1)
    print ("Bitwise LEFT SHIFT operator on val 1:", val 1 << 1)
    print ("Bitwise RIGHT SHIFT operator on val 2:", val 2 >> 1)
operators ()
```
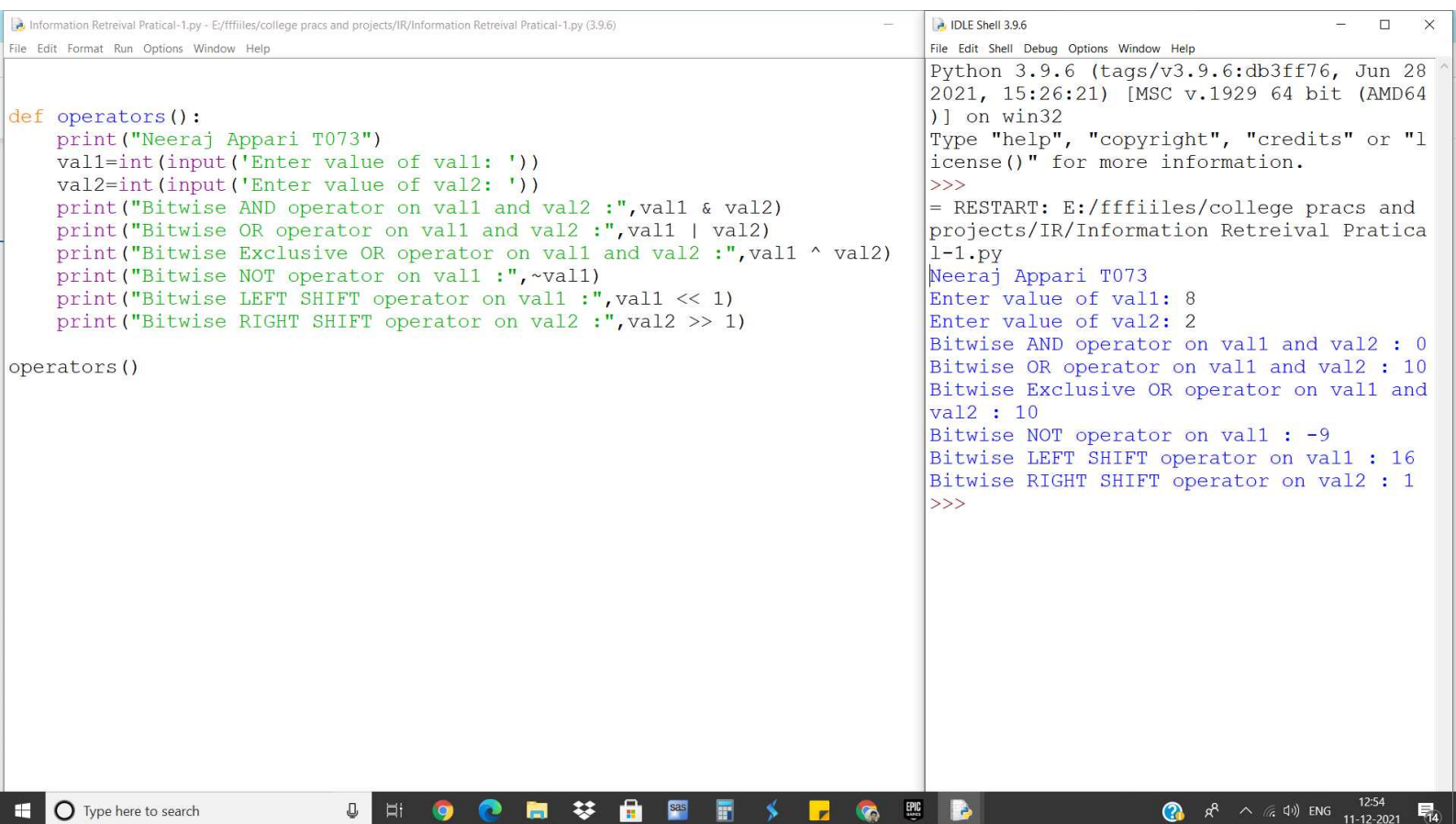
Output :
Enter 1st String = Good Day
Enter 2nd String = Bod Dole
Enta 3rd String = Neutrol Boy
Enter a word : Bod
Vector = 6 1 0
Neeroj Apnai 7023

Information Retreival Pratical-1.py - E:/fffiiles/college pracs and projects/IR/Information Retreival Pratical-1.py (3.9.6)

File Edit Format Run Options Window Help

```python
def operators():
    print("Neeraj Appari T073")
    val1=int(input('Enter value of val1: '))
    val2=int(input('Enter value of val2: '))
    print("Bitwise AND operator on val1 and val2 :",val1 & val2)
    print("Bitwise OR operator on val1 and val2 :",val1 | val2)
    print("Bitwise Exclusive OR operator on val1 and val2 :",val1 ^ val2)
    print("Bitwise NOT operator on val1 :",~val1)
    print("Bitwise LEFT SHIFT operator on val1 :",val1 << 1)
    print("Bitwise RIGHT SHIFT operator on val2 :",val2 >> 1)

operators()
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28
2021, 15:26:21) [MSC v.1929 64 bit (AMD64
)] on win32
Type "help", "copyright", "credits" or "l
icense()" for more information.
>>>
= RESTART: E:/fffiiles/college pracs and
projects/IR/Information Retreival Pratica
l-1.py
Neeraj Appari T073
Enter value of val1: 8
Enter value of val2: 2
Bitwise AND operator on val1 and val2 : 0
Bitwise OR operator on val1 and val2 : 10
Bitwise Exclusive OR operator on val1 and
val2 : 10
Bitwise NOT operator on val1 : -9
Bitwise LEFT SHIFT operator on val1 : 16
Bitwise RIGHT SHIFT operator on val2 : 1
>>>
```

Type here to search

```
def VofStr(t,x):
    print("Neeraj Appari T073")
    for i in range (0,len(x)):
        if t in x:
            return 1
        else:
            return 0
s1=[item for item in input ('Enter 1st String: ').split()]
s2=[item for item in input ('Enter 2nd String: ').split()]
s3=[item for item in input ('Enter 3rd String: ').split()]
t=str(input('Enter a word: '))
print('Vector : ',VofStr(t,s1),VofStr(t,s2),VofStr(t,s3))
```

IDLE Shell 3.9.6

File Edit Shell Debug Options Window Help

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21)
[MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for mo
re information.
>>>
= RESTART: E:/fffiiles/college pracs and projects/IR/Info
rmation Retreival Pratical-1(B).py
Enter 1st String: Good Day
Enter 2nd String: Bad Day
Enter 3rd String: Neutral Day
Enter a word: Bad
Neeraj Appari T073
Neeraj Appari T073
Neeraj Appari T073
Vector :  0 1 0
>>>
```