**PYTHON NOTES –**

**Q. Write a program to print the digit at one's place of a number.**

Example - 12345

n=int(input("Enter the number: "))

n=n//10;

x=n%10;

print(x);

**Q. Write a program to print the ASCII value of a character.**

**Q. Write a program to read a character in upper case and print it in lower case.**

**Q. Write a program to demonstrate implicit and explicit type conversion.**

**Q. Write a program to calculate simple interest and compound interest.**

**Q. Write a program to find x^y.**

**Q. Find the total number of seconds in a day.**

**Operators and Expressions in Python.**

1. Aritmetic Operators.

2. Comparison Operators (Relational).

3. Assignment Operator.

4. Logical Operator.

5. Unary Operator.

6. Bitwise Operator.

7. Membership Operator.

8. Identity Operator.

**1. Arithmetic Operator:** +, -, \*, /, //(floor division), \*\*(exponent), %.

**2. Comparison Operator:** ==, >=, <=,!=,>,<. All these operators return Boolean value, Either True or False.

**3. Assignment Operator and Inplace or Shortcut Operator:**

+=, -=, \*=, /=, //=, %=, \*\*=.

b=5

a=b

print(a)

a=a+10

x=20

x+=10

print(x)

y=10

y\*\*=3

print(y)

name='Rupak'

name+=' Sarkar'

print(name)

**Ternary Operator:**

Example: x = a>b?a:b (For C)

**Bitwise Operator:** & (AND), | (OR), ^ (X-OR), ~ (Bitwise NOT).

**Shift Operator:**

p=5

print(p<<1)

#It will print the value by doubling the initial value.

print(p>>1)

#It will reduce the value by dividing it by 2.

q=15

print(q>>1) # Output will be 7 (0111).

**Logical Operator:** && (and), ||(or), !(not).

**Q. Print the greatest of three numbers using logical operator.**

a=10

b=20

c=30

if(a>b and a>c):

print("a is the greatest.", a)

elif(b>a and b>c):

print("b is the greatest.", b)

else:

print("c is the greatest.", c)

**x++, x-- is not allowed in Python.**

**Q. Write a program to check whether a given year is leap year or not.**

**Membership Operator:**

Whether the element is present within the sequence or not is checked by the Membership Operator. (in, not in.)

Membership operator will return TRUE or FALSE, depending on the result.

**Types of Expression in Python:**

**1. Based on the position of operator the expressions are evaluated.**

a. Infix Expression. (a+b)

b. Prefix Expression. (+ab)

c. Postfix Expression. (ab+)

**2. Based on Datatype:**

Constant, Floating, Relational, Logical, Assignment, Bitwise Expressions.