operands → 11 ← Result

Arithmetic operators

```
a = 7
b = 4
c = a + b
Print (c)
```

output
11

Assignment operators

```
a = 4 - 2
Print (a)
b = 6
b -= 3
Print (b)
```

output
2
3

Comparison operators

```
d = 5 > 4
Print (d)
```

output
True

DATE : / /
PAGE NO. :

logical operators

And, or

or Truth table		output
True	True	True
False	False	False
True	False	True
False	True	True

and Truth table		output
True	True	True
False	False	False
True	False	False
False	True	False

Not (Print opposite)

Example

Print(not (False))

☆ Type Casting

Q Print the Type of variable

a = 3 t = type (a) Print (t) output <class 'int'>	a = 4.5 t = type (a) Print (t) output <class 'float'>	a = "vidhi" t = type (a) Print (t) output <class 'str'>

Type() function is used to find the data type of a given variable in Python.

DATE : / /
PAGE NO. :

There are many functions to convert one data type into another

```
a = "4.3"
t = type(a)
Print(t)

output
<class 'str'>
```

```
a = "4.3"
b = float(a)
t = type(b)
print(t)
output
<class 'float'>
```

Input() Function

```
a = input("Enter number 1: ")
b = input("Enter number 2: ")

Print("Number a is :", a)
Print("Number b is : ", b)

Print("Sum is:", a + b)
```

output

```
Enter number 1: 3
Enter number 2: 2
Number a is : 3
Number b is : 2
Sum is : 32
```

It did not add the number it concatenated them 3+2 = 32 Not 3+2 = 5 "Why" because it take it as String not as a number like " in REPL we can do "VIDHI" + DIVALA" = VIDHIDIVALA

DATE : / /
PAGE NO. :

Here in this code we do sum of the Previous number by converting them into int so it will take them as int and do addition not take it as string.

```
a = int (input (" Enter number 1 : "))
b = int (input (" Enter number 2 : "))
        # maine yaha string ko int me kardiya sum ke liye
Print (" Number a is : ", a)
Print (" Number b is : ", b)

Print (" Sum is : ", a+b)
```

output

Enter number 1 : 8
Enter number 2 : 2
number a is : 8
number b is : 2
Sum is : 10

DATE : / /
PAGE NO. :

Ch-2 (practice set)

Q1 Write a python program to add two numbers.

```
a = 2
b = 7
print (2 + 7)
```

Output
9

Q2 Write a python program to find remainder when a number is divided by X

```
a = 36
b = 5
Print ("Remainder when a number is divided by b is:", a%b)
```

output
1

Q3 Check the type of variable assigned using input ( ) function.

```
a = input ("Enter the value of a")
print (type (a))
```

output
<class 'str'>

DATE : / /
PAGE NO :

Q4 Use comparison operator to find out whether a given variable is greater than 'b' or not. Take a = 34 and b = 80

A
```
a = 34
b = 80
Print ('a is greater than b or not:', a > b)
```

output
False

Q5 Write a python program to find an average of two number enter by the user

A
```
a = int (input ("enter a number 1:"))
b = int (input ("enter a number 2:"))
Print ("Average of two number is:", (a+b)/2)
```

output
enter a number 1: 10
enter a number 2: 10
Average of two number is: 10

Q6 Write a python program to calculate the square of a number entered by the user.

A
```
a = int (input ("enter a number:"))
Print ("square of a number is:", a*a) / a**2)
```

output
enter a number: 4
square of a number is: 16

DATE : / /
PAGE NO. :

ch = 3

Strings

it a datatype it's also a sequence of character enclosed in quotes " ".

we can writ a string in 3 primarily ways.

a = 'Vidh'
b = "Vidh"
c = """Vidh"""

[String is immutable]

String Slicing

Name = "V I D H I" => lenght = 5
0 1 2 3 4
(-5)(-4)(-3)(-2)(-1)

Sl = name [ind_start : ind_end]

# code
name = "Vidhi"
nikename = name [0:3] / [:3]
Print (nikename)

Slicing with skip value

~~word = "A, B, C, d, e,~~
word = "ABCDefghIjKLmnOPq"
Word [3 : 8 : 2]

output
'd f h'

3 D 3rd index Per h 8th index Per DE 2 number skip
Kar Ke f aaya.