

1. Define two variables in Python and declare it as "a" and "b" and print it.

```
1 a=1
2 b="CSE"
3 print('Value assigned to variable a is',a)
4 print ('value assigned to variable b is',b)
```

Value assigned to variable a is 1
value assigned to variable b is CSE

2. Perform the addition, subtraction, multiplication, division , floor,division, raise power on two numbers and print the result.

```
1 a=13
2 b=5
3 c=a+b
4 d=a-b
5 e=a*b
6 f=a/b
7 print('Addition of a and b is',c)
8 print('Subtraction of a and b is',d)
9 print('Multiplication of a and b is',e)
10 print('Division of a and b is',f)
```

```
➤ Addition of a and b is 18
Subtraction of a and b is 8
Multiplication of a and b is 65
Division of a and b is 2.6
```

3. Define variables of type: integer, float, complex, string and print variable class (type)

```
1 a=12+1j
2 print('Value assign to varibale a is ',a)
3 b=type(a)
4 print('Class (type) of variable a is ',b)
```

Value assign to varibale a is (12+1j)
Class (type) of variable a is <class 'complex'>

4. If a=10 and b='20', then perform it's addition using type casting

```
1 a='10'
2 b='20'
3 c=int(a)+float(b)
4 print("Addition of a and b is ",c)
```

Addition of a and b is 30.0

5. Write a code to concatenate two words in python.

```
1 a=' HELLO '
2 b=' SE CSE '
3 print(a+''+b)
```

HELLO SE CSE

6. Write the code to take input as name and division from user and print it.

```
1 name=input('Enter your name ')
2 branch=input('Enter your branch ')
3 print(name, 'is in' ,branch,'branch')
```

Enter your name Rahul
Enter your branch CSE
Rahul is in CSE branch

7. Write a code to convert Decimal number into Binary, Octal, Hexadecimal.

```

1 a=10
2 b=bin(a)
3 print("Binary representation is: ",b)
4 b=hex(a)
5 print("Hexadecimal representation is: ",b)
6 b=oct(a)
7 print("Octal representation is: ",b)
8

```

```

    Binary representation is: 0b1010
    Hexadecimal representation is: 0xa
    Octal representation is: 0o12

```

8. Write a code to perform logical operations.

```

1 high_income=False
2 good_credit=True
3 if not high_income and good_credit:
4     print('Eligible for loan')
5 else:
6     print('Not eligible for loan')

```

```

    Eligible for loan

```

9. Write a code to perform bitwise operations (Complement, AND and OR, Left shift, Right Shift)

```

1 a=~10
2 print(a)
3
4 a=12 & 13
5 print(a)
6
7 a=12|13
8 print(a)
9
10 a=12^13
11 print(a)
12
13 a=10<<2
14 print(a)
15
16 a=10>>2
17 print(a)
18

```

```

    -11
    12
    13
    1
    40
    2

```

10. Write a code to perform Comparison operations.

```

1 name=input('Enter your name ')
2 length=len(name)
3 if length<3:
4     print('name should be of atleast 3 characters')
5 elif length>20:
6     print('name should be of maximum 20 characters')
7 else:
8     print('name length is correct ')

```

```

    Enter your name Rahul
    name length is correct

```