
Prectical Set -2

1. Write a Python program to find area of a triangle.

```
base = int(input('Enter Value Of Base : '))
height = int(input('Enter Value Of Height : '))
area = (base * height)/2
print('Area Of Triangle :',area)
```

2. Write a Python program to find area of a square.

```
side = int(input('Enter Value Of Area : '))

area = side * side

print('Area Of Squre : ' , area)
```

3. Write a Python program to convert Celsius to Fahrenheit.

```
# °F = (9/5 × °C) + 32.

cel = int(input('Enter Value Of Celsius :'))

fahren = (9/5 * cel) + 32

print('Fahrenheit of celsius ',cel,'is : ',fahren)
```

4 write a python program to convert US doller to Indin Rupees

```
doller = int(input("Enter Us Doller :"))
rupees = doller * 83.12
print("Rupees Is ",rupees)
```

5 write a program to convert liter to mililiter

```
liter = int(input("Enter Liter :"))
mili = liter * 1000
print("Mili Liter : ",mili)
```

6 Enter binary,octal and hexadecimal values to convert it into decimal

```
binary = 0b110010
print('Binary To Decimal',int(binary))
octal = 0o62
print('Octal To Decimal',int(octal))
```

Prectical Set -2

```
hexa = 0x32
print('Hexadecimal To Decimal',int(hexa))
```

7. Accept one integer value from the user; convert it to binary, octal and hexadecimal.

```
deci = int(input("Enter Value:"))
binary = bin(deci)
octal = oct(deci)
hexa = hex(deci)
print("Decimal : ",deci)
print("Binary =>",binary)
print("Octal =>",octal)
print("Hexadecimal =>",hexa)
```

8 Accept string from the user ('The Rajkot is a good city to leave'), and do the following operations: i). Display the first character of the string, ii). Display the first character of the string using negative index, iii). Display 'Rajkot is a good city'. iv). Display the last character.

```
str = 'The Rajkot is good city to leave'

print(str[0])

print(str[4:24])

print(str[-1])
```

9. Create bytes, enter some values and display all elements.

```
a = bytes([65,66,67])
print(a)
```

10. Create bytearray, enter some values and perform the following: i). Replace the 3rd element with 7, ii). Display the 5th element.

```
barr = bytearray([65,66,67,68,69,70,71,72,73,74,75])

print(barr)
```

Prectical Set -2

```
barr[2] = 7
print(barr[2])

print(barr[4])
```

11. Create list and insert values. i).Display all the elements. ii). Display the 3rd element,iii). Replace the 4th element with 'Atmiya', iv). Display elements from 3rd to 7th element.

```
li = [1,2,3,4,5,6,7,8,9,10]

print(li)
print(li[2])
li[3] = 'Atmiya'
print(li)
print(li[2],li[6])
```

12. Create tuple and insert values. i). Try to replace the 3rd element with 9, ii). Display the 5th element.

```
tup = (1,2,3,4,5,6,7,8,9,10)

print(tup)

# tup[2] = 9
print(tup[2])
# Once a tuple is created, you cannot change its values.

print(tup[4])
```

13. Create a set insert some values. i). Add elements to it and display, ii). Remove elements from it and display.

```
s = {1,2,3,4,5}

print(s)

s.add(6)
s.add(7)

print(s)
```

Prectical Set -2

```
s.remove(4)
```

```
print(s)
```

14. Create a set insert some values and convert it to frozenset. Try to add and remove some elements.

```
s = {1,2,3,4,5}
```

```
fs = frozenset(s)
```

```
print(fs)
```

```
fs.add(6)
```

Once a frozenset is created, you cannot change its values.

```
fs.remove(3)
```

```
print(fs)
```

15. Create an empty dictionary, Insert some Roll:Name into it. i). Retrieve 5th value using key, ii). Retrieve all the roll numbers, iii). Retrieve all the names, iv). Change the name of the student having roll no. 7, v). Remove roll no 9, vi). Display the dictionary.

```
sdict = {}
```

```
sdict = {  
    1: 'Yash',  
    2: 'Dhaval',  
    3: 'Mahaveer',  
    4: 'Mukesh',  
    5: 'Jay',  
    6: 'Abhi',  
    7: 'Keval',  
    8: 'Rahul',  
    9: 'Raj',  
    10: 'Kevin'  
}
```

i). Retrieve 5th value using key

```
print(sdict.get(5))
```

Prectical Set -2

ii). Retrieve all roll numbers

```
rno = list(sdict.keys())
```

```
print(rno)
```

iii). Retrieve all names

```
nm = list(sdict.values())
```

```
print(nm)
```

iv). Change the name of the student with roll no. 7

```
sdict[7] = 'Ram'
```

v). Remove roll no. 9

```
sdict.pop(9)
```

vi). Display the dictionary

```
print(sdict)
```

16. Create a list having names of months. i). Check whether December is in list or not, ii). Query the list using 'not in'.

```
months = ['January', 'February', 'March', 'April', 'June', 'July', 'August',  
'September', 'October', 'November', 'December']
```

```
dec = "December" in months
```

```
print("Is December in the list ",dec)
```

```
notin = "May" in months
```

```
print("Is not in the list ",notin)
```

17. Take two integer values from the user using split(), perform basic arithmetic operation on the values.

```
value = input("Enter two integer values separated by space: ")
```

```
values = value.split()
```

```
num1 = int(values[0])
```

```
num2 = int(values[1])
```

```
add = num1 + num2
```

```
sub = num1 - num2
```

Prectical Set -2

```
mul = num1 * num2
div = num1 / num2

print(f"Sum: {add}")
print(f"Difference: {sub}")
print(f"Product: {mul}")
print(f"Quotient: {div}")
```