PYTHON PRACTICE SET - 2 :- SOLUTION

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 ',cal,'is : ',fahren)
```

4. Write a python program to convert US dollar to Indian Rupees

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

5. Write a program to convert liter to milliliter

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

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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))
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("Bianry =>",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)
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)
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: 'Milan',
    2: 'Krushal',
    3: 'Vishal',
    4: 'Mehul',
    5: 'Rahul',
    6: 'Jeet',
    7: 'Khan',
    8: 'Yash',
    9: 'Mahaveer',
    10: 'Paras'
}

# i). Retrieve 5th value using key
print(sdict.get(5))

# 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)


a= "May" not in months
print("May is not in the list ",a)
```

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
mul = num1 * num2
div = num1 / num2
print("Sum: {add}")
print("Difference: {sub}")
print("Product: {mul}")
print("Quotient: {div}")
```