

Experiment No:- 1

- 1 write a program to Print "welcome to python world"
- 2 write a program to Input your name, age and address and print them.
- 3 write a program to find the area and perimeter of a circle.
- 4 write a Program to input two integers, find sum and Product of them.
- 5 write a Program to input two integers and swap them using 3rd variable
- 6 write a Program to input two integers and swap them without using 3rd variable.
- 7 write a Program to input your marks for three subjects then find sum and percentage
- 8 write a Program to find the area and perimeter of a triangle.

Answer:-

1 Print ("welcome to python world")

output:-

welcome to python world

2 name=input("Enter your name :-")

age=int(input("Enter your age :-"))

address=input("Enter your address :-")

print("Name :- ", name)

print("Age :- ", age)

print("Address :- ", address)

Output:-

Enter your name :- Rajesh Rana

Enter your age :- 20

Enter your address :- Bhadrak

Name :- Rajesh Rana

Age :- 20

Address :- Bhadrak

```
3 r = int(input("Enter the radius:- "))  
print("Area is ", (3.14 * r * r))  
print("Perimeter is ", (2 * 3.14 * r))
```

Output:-

Enter the radius :- 2

Area is 12.56

Perimeter is 12.56

```
4 a = int(input("Enter first number :- "))  
b = int(input("Enter second number :- "))  
print(a, "+", b, "=", (a + b))  
print(a, "x", b, "=", (a * b))
```

Output:-

Enter first number :- 2

Enter second number :- 3

2 + 3 = 5

2 x 3 = 6


```
5 a = int(input('Enter first number :-'))  
  b = int(input('Enter second number :-'))  
  print("Before swapping :- a =", a, "b =", b)  
  temp = a  
  a = b  
  b = temp  
  print("After swapping :- a =", a, "b =", b)
```

Output:-

Enter first number :- 8
Enter second number :- 7
Before swapping :- a = 8 b = 7
After swapping :- a = 7 b = 8

```
6 a = int(input('Enter first number :-'))  
  b = int(input('Enter second number :-'))  
  print("Before swapping :- a =", a, "b =", b)  
  a = a + b  
  b = a - b  
  a = a - b  
  print("After swapping :- a =", b, "b =", a)
```

Output:-

Enter first number :- 5
Enter second number :- 6
Before swapping :- a = 5 b = 6
After swapping :- a = 6 b = 5

7

```

a = int(input("Enter your first subject mark :- "))
b = int(input("Enter your second subject mark :- "))
c = int(input("Enter your third subject mark :- "))
sum = a + b + c
per = sum / 3
print("Total mark is", sum)
print("Percentage is", per)

```

output:-

```

Enter your first subject mark :- 70
Enter your second subject mark :- 80
Enter your third subject mark :- 90
Total mark is 240
Percentage is 80.0

```

8

```

a = int(input("Enter first side :- "))
b = int(input("Enter second side :- "))
c = int(input("Enter third side :- "))
sum = a + b + c
s = sum / 2
area = (s * (s - a) * (s - b) * (s - c)) ** 0.5
print("Area is", area)
print("Perimeter is", sum)

```

output:-

```

Enter first side :- 2
Enter second side :- 3
Enter third side :- 4
Area is 2.9047375096555625
Perimeter is 9

```


Experiment No :- 2

Date	_____
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- 1 write a program to display simple interest and compound interest.
- 2 write a program to input 1st name, mid name, and last name into three variables and then apply concatenation.
- 3 write a program to create a list by initializing with 5 different fruits names and display them.
- 4 write a program to create a tuple and display the elements of it.
- 5 write a program to create a dictionary, store sample data and then display the key, values of it.
- 6 write a program to input a sentence and then ^{print} the reverse of it.
- 7 write a program to input data for int, string, float, boolean, complex, and then display their data type.
- 8 write a program to input a string "hello world". Display it in: upper case, lower case, 1st letter capitalized, find length.
- 9 write a program to input a string "good morning friends how are you all" and do the operations: display in reverse order of characters, split whole sentence into individual words and store as a list.

1. write a program to input a string " hi ram hi shyam
hi mam ". Search the word "hi" and replace it
with "hello". Remove the white spaces from the beginning
and end and then display the sentence.

Answer:

```
1. P=float(input("Enter the principal amount :-"))
R=float(input("Enter the rate of interest :-"))
T=float(input("Enter the time period in year's :-"))
N=int(input("Enter the number of times interest is
compounded per year :-"))
SI=(P*R*T)/100
Print("Simple interest is :- ", SI)
A=P*(1+R/N)**(N*T)
CI=A-P
Print("Compound interest is :- ", CI)
```

Output:-

```
Enter the principal amount :- 12000
Enter the rate of interest :- 8
Enter the time period in year's :- 2.5
Enter the number of times interest is compounded per year :- 2
Simple interest is :- 2400.0
Compound interest is :- 3748000.0
```



```
2 a = Input("Enter your 1st name :- ")
b = input("Enter your mid name :- ")
c = input("Enter your last name :- ")
full-name = a+b+c
Print("Your name is", full-name)
```

output:

Enter your 1st name :- Jiban
Enter your ~~mid~~ name :- Jyoti
Enter your last name :- Puthal
Your name is Jiban Jyoti Puthal

```
3 l=[]
print("Enter five fruits name :- ")
for i in range(0,5):
    l.append(input())
print("The entered fruits name are :- ", end=" ")
for i in range(0,5):
    print(l[i], end=" ", "
```

output:

Enter five fruits name :-
apple
banana
cherry
mango
coconut

The entered fruits name are:- apple, banana, cherry,
mango, coconut,


```
2 a = Input("Enter your 1st name :-")
  b = input("Enter your mid name :-")
  c = input("Enter your last name :-")
  full-name = a+b+c
  print("Your name is", full-name)
```

output:-

Enter your 1st name :- Jiban
Enter your ~~mid~~ name :- Jyoti
Enter your last name :- Puthal
Your name is Jiban Jyoti puthal

```
3 l=[]
  print("Enter five fruits name :-")
  for i in range(0,5):
      l.append(input())
  print("The entered fruits name are :- ", end=" ")
  for i in range(0,5):
      print(l[i], end=" ",)
```

output:-

Enter five fruits name :-
apple
banana
cherry
mango
coconut

The entered fruits name are:- apple, banana, cherry, mango, coconut,


```
4 t = (15, "Rajesh Rana", 20, "Bhadraak")  
print ("Elements in the tuple are:-", end=" ")  
for i in t:  
    print (i, end=" ",)
```

output:-

Elements in the tuple are:- 15, Rajesh Rana,
20, Bhadrak,

```
5 d = { "Name": "Rajesh Rana",  
        "Roll Number": "24CSEAIMLO15",  
        "Age": 20  
    }
```

```
print ("Dictionary data are:-", d)  
print ("Keys are:-", d.keys())  
print ("Values are:-", d.values())
```

output:-

Dictionary data are:- {'Name': 'Rajesh Rana',
'Roll Number': '24CSEAIMLO15', 'Age': 20}
Keys are:- dict_keys(['Name', 'Roll Number', 'Age'])
Values are:- dict_values(['Rajesh Rana', '24CSEAIMLO15',
20])

```
6 s = input ("Enter a string:- ")  
print ("Reversed string is:-", s[::-1])
```

output:-

Enter a string:- Rajesh Rana
Reversed string is:- anar hsejaR

7 $i = 20$

$s = "Rajesh"$

$f = 8.88$

$b = True$

$c = 2 + 7j$

`print("Datatype of i is:", type(i))`

`print("Datatype of s is:", type(s))`

`print("Datatype of f is:", type(f))`

`print("Datatype of b is:", type(b))`

`print("Datatype of c is:", type(c))`

output:-

datatype of i is: <class 'int'>

Datatype of s is: <class 'str'>

Datatype of f is: <class 'float'>

Datatype of b is: <class 'bool'>

Datatype of c is: <class 'complex'>

8 $s = "hello world"$

`print(s, "in upper case:", s.upper())`

`print(s, "in lower case:", s.lower())`

`print(s, "in 1st capitalize:", s.capitalize())`

`print(s, "length is:", len(s))`

output:-

hello world in upper case: ~~HELLO WORLD~~ HELLO WORLD

hello world in lower case: hello world

hello world in 1st capitalize: Hello world

hello world length is: 11

9 s = "Good morning friends how are you all"
Print ("In reverse order:", s[::-1])
L = s.split(" ")
print ("Splitting the words:", L)

output:-

In reverse order: all you are how friends morning Good
ehnnrom doog

splitting the words: ['Good', 'morning', 'friends', 'how', 'are', 'you', 'all']

10 s = " hi ram hi shyam hi ram "

s = s.replace("hi", "hello")

Print ("After replacing the 'hi' with 'hello':", s)

Print ("After removing the white space:", s.strip())

output:-

After replacing the 'hi' with 'hello': hello ram
hello shyam hello ram

After removing the white space: hello ram hello shyam
hello ram