

## Experiment No:-1

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- 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

$2 + 3 = 5$

$2 \times 3 = 6$

```

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 =", b)

```

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 2.9047374096555625
Perimeter is 9
```

## Experiment No :- 2

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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 <sup>print</sup> 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 nam hr shyam  
hi man ". Search the word "hi" and replace it with "hello". Remove the white spaces from the beginning and end and then display the sentence.

Answer :-

```
2 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)
CI=P*(1+r/n)*(n*t)
print("Compound interest is :- ", CI)
```

Output:-

```
Enter the principal amount:-12000
Enter the rate of interest :-8
Enter the time period in years :-2.5
Enter the number of times interest is compounded per year:-2
Simple interest is :- 2400.0
Compound interest is :- 37488000.0
```

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 :- Jibah  
 Enter your ~~mid~~ name :- Jyoti  
 Enter your last name :- Puthad  
 Your name is Jibah Jyoti puthad

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 :- Jibah

Enter your ~~mid~~ name :- Jyoti

Enter your last name :- Puthad

Your name is Jibah Jyoti Puthad

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  $t = (15, "Rajesh Rana", 20, "Bhadراك")$

print ("Elements in the tuple are:- ", end=" ")

for i in t:

print (i, end=", ")

Output:-

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

5  $d = \{ "Name": "Rajesh Rana",$

    "Roll Number": "24CSEAIML015",

    "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': '24CSEAIML015', 'Age': 20}

Keys are :- dict\_keys(['Name', 'Roll Number', 'Age'])

Values are :- dict\_values(['Rajesh Rana', '24CSEAIML015',  
20])

6  $s = \text{input} ("Enter a string:- ")$

print ("Reversed string is :- ", s[::-1])

Output:-

Enter a string:- Rajesh Rana

Reversed string is :- anaR hsejRa

7)  $i = 20$

$s = "Rajes"$

$f = 8.88$

$b = \text{True}$

$c = 2 + 7j$

```
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  $s = \text{"Good morning friends how are you all"}$   
 $\text{Print ("In reverse order : ", s[::-1])}$   
 $\text{l. SPLIT (" ")}$   
 $\text{print ("Splitting the words : ", l)}$

Output:-

In reverse order: Ma voy era woh sheinf  
dninnom doot

Splitting the words: ["Good", "morning", "friends",  
"how", "are", "you", "all"]

10  $s = \text{" hi ram hi shyam hi ram "}$   
 $s = s.replace("hi", "hello")$   
 $\text{Print ("After replacing the 'hi' with 'hello': ", s)}$   
 $\text{Print ("After removing the white space: ", s.strip())}$

Output:-

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

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