

Question 1:- Program to find sum of two Numbers

```
n1=int(input("Enter first Number:-"))
n2=int(input("Enter Second Number:-"))
add=n1+n2
print(f"Sum of {n1} + {n2} = {add}")
```

```
Enter first Number:- 5
Enter Second Number:- 10
```

```
Sum of 5 + 10 = 15
```

Question 2:- Program to find area and circumference of circle.(area= $\pi * r * r$ and Circumference= $2 * \pi * r$)

```
r=int(input("Enter the radius:-"))
area=3.14*r*r
cir=2*3.14*r
print(f"Area of Circle = {area} .")
print(f"Circumference of circle = {cir} .")
```

```
Enter the radius:- 5
```

```
Area of Circle = 78.5 .
```

```
Circumference of circle = 31.400000000000002 .
```

Question 3:- Program to find Simple Interest. ($SI = (\text{Principal Amount} * \text{Rate of Interest} * \text{time}) / 100$)

```
p=int(input("Enter the Principal Amount:-"))
r=int(input("Enter the Rate of Interest:-"))
t=int(input("Enter the Time:-"))
```

```
SI=(p*r*t)/100
print(f"Simple Interest = {SI} .")
```

```
Enter the Principal Amount:- 10000
Enter the Rate of Interest:- 5
Enter the Time:- 2
```

```
Simple Interest = 1000.0 .
```

Question 4:- Program to convert temperature from degree centigrade to Fahrenheit. ($f = (1.8 * c) + 32$)

```
c=float(input("Enter Degree in Centigrade:-"))
f=(1.8 * c)+32
print(f"{c} Degree Centigrade = {f} Degree Fahrenheit. ")
```

```
Enter Degree in Centigrade:- 32
```

```
32.0 Degree Centigrade = 89.6 Degree Fahrenheit.
```

Question 5:- Program to calculate sum of 5 subject and find percentage.

```
name=input("Enter Student Name:-")
n=int(input("Enter Number of Subject:-"))
m=n
mark_name={}
for i in range(1,n+1):
    sub_name=input(f"Enter {i} Subject Name:-")
    marks=float(input("Enter Marks:-"))
    mark_name[sub_name]=marks
add=0
for j in mark_name:
    add=add+mark_name[j]

print(f"Student Name is - {name} .")
print("Subject Name          Marks")
for key, value in mark_name.items():
    print(f"{key}           {value}")
```

```
print("Total Marks:-", add)
print("Percentage is :-",add/m)
```

```
Enter Student Name:- Sushil Kushwaha
Enter Number of Subject:- 5
Enter 1 Subject Name:- Hindi
Enter Marks:- 78
Enter 2 Subject Name:- English
Enter Marks:- 69
Enter 3 Subject Name:- Mathe
Enter Marks:- 87
Enter 4 Subject Name:- Physicses
Enter Marks:- 69
Enter 5 Subject Name:- Chemistry
Enter Marks:- 87
```

```
Student Name is - Sushil Kushwaha .
Subject Name      Marks
Hindi             78.0
English           69.0
Mathe             87.0
Physicses         69.0
Chemistry         87.0
Total Marks:- 390.0
Percentage is :- 78.0
```

Question 6:-Program to Reverse a given number.

```
n=int(input("Enter More Than Two Digit Number:-"))
m=n
s=0
while n>0:
    rem=n%10
```

```
s=s*10+rem  
n=n//10
```

```
print(f"Reverse of {m} is - {s}")
```

Enter More Than Two Digit Number:- 12345

Reverse of 12345 is - 54321

Question 7:-Program to show swap of two Number without using third variable.

```
num1=int(input("Enter First Number:-"))  
num2=int(input("Enter Second Number:-"))  
  
print(f"Before swapping: num1 = {num1}, num2 = {num2}")
```

```
num1, num2 = num2, num1
```

```
print(f"After swapping: num1 = {num1}, num2 = {num2}")
```

Enter First Number:- 6
Enter Second Number:- 4

Before swapping: num1 = 6, num2 = 4
After swapping: num1 = 4, num2 = 6

Question 8:- Program to find gross salary. (da,ta,hra,)

```
bs=float(input("Enter Your Base Salary:-"))  
ta=float(input("Enter Your TA:-"))  
da=float(input("Enter Your DA:-"))  
hra=float(input("Enter Your HRA:-"))  
DA=bs*da/100  
TA=bs*ta/100  
HRA=bs*hra/100  
gs=DA+TA+HRA+bs
```

```
print("Summary of Your Salary:-")
print("Bass Salary:-",bs)
print(f"{ta} % of Your TA is:- {TA} ")
print(f"{da} % of Your TA is:- {DA} ")
print(f"{hra} % of Your TA is:- {HRA} ")
print("Your Gross Salary:-",gs)
```

```
Enter Your Base Salary:- 10000
Enter Your TA:- 10
Enter Your DA:- 5
Enter Your HRA:- 25
```

```
Summary of Your Salary:-
Bass Salary:- 10000.0
10.0 % of Your TA is:- 1000.0
5.0 % of Your TA is:- 500.0
25.0 % of Your TA is:- 2500.0
Your Gross Salary:- 14000.0
```

Question 9(a):- Program to print a Table of any number.

```
n=int(input("Enter the Number, You want to print Table:-"))
for i in range(1,11):
    tab=i*n
    print(tab)
```

```
Enter the Number, You want to print Table:- 10
```

```
10
20
30
40
50
60
70
80
```

90
100

Question 9(b):- Program to print a Table from 1 to n number.

```
n=int(input("Enter the Number:-"))
for i in range(1,11):
    for j in range(1,n+1):
        print(f"{i} X {j} ={i*j}" , end="\t")
    print("")
```

Enter the Number:- 5

1 X 1 =1	1 X 2 =2	1 X 3 =3	1 X 4 =4	1 X 5 =5
2 X 1 =2	2 X 2 =4	2 X 3 =6	2 X 4 =8	2 X 5 =10
3 X 1 =3	3 X 2 =6	3 X 3 =9	3 X 4 =12	3 X 5 =15
4 X 1 =4	4 X 2 =8	4 X 3 =12	4 X 4 =16	4 X 5 =20
5 X 1 =5	5 X 2 =10	5 X 3 =15	5 X 4 =20	5 X 5 =25
6 X 1 =6	6 X 2 =12	6 X 3 =18	6 X 4 =24	6 X 5 =30
7 X 1 =7	7 X 2 =14	7 X 3 =21	7 X 4 =28	7 X 5 =35
8 X 1 =8	8 X 2 =16	8 X 3 =24	8 X 4 =32	8 X 5 =40
9 X 1 =9	9 X 2 =18	9 X 3 =27	9 X 4 =36	9 X 5 =45
10 X 1 =10	10 X 2 =20	10 X 3 =30	10 X 4 =40	10 X 5 =50

Question 10:- Program to find Greatest in 3 number.

```
num1=int(input("Enter First Number:-"))
num2=int(input("Enter Second Number:-"))
num3=int(input("Enter third Number:-"))

if num1>num2 and num1>num3:
    print(f"{num1} is greatest.")
elif num2>num1 and num2>num3:
    print(f"{num2} is greatest.")
```

```
else:  
    print(f"{num3} is greatest.")
```

```
Enter First Number:- 5  
Enter Second Number:- 6  
Enter third Number:- 2
```

```
6 is greatest.
```

Question 11:- Program to show the use of conditional operator.

```
num1=int(input("Enter First Number:-"))  
num2=int(input("Enter Second Number:-"))  
  
Max_value= num1 if num1>num2 else num2  
print(f"The Largest Number between {num1} and {num2} is {Max_value}")
```

```
Enter First Number:- 6  
Enter Second Number:- 9
```

```
The Largest Number between 6 and 9 is 9
```

Question 12:- Program to find that entered year is leap year or not.

```
year=int(input("Enter the year:-"))  
if year%400==0:  
    print("This is leap Year")  
elif year%4==0:  
    print("This is Leap Year")  
elif year%100==0:  
    print("This is Leap Year")  
else:  
    print("This Is Not Leap year")
```

```
Enter the year:- 2025
```

This Is Not Leap year

Question 13:- Program to find whether given number is even or odd.

```
num1=int(input("Enter Number:-"))
if num1%2==0:
    print(f"Number {num1} is Even")
else:
    print(f"Number {num1} is Odd")
```

Enter Number:- 5

Number 5 is Odd

Question 14:- Program to shift inputed data by two bits to left.

```
num1=int(input("Enter Number:-"))

left_shift= num1<<2
right_shift=num1>>2

print(f"The result of Shifting {num1} by two bits to the left is {left_shift} ")
print(f"The result of Shifting {num1} by two bits to the right is {right_shift} ")
```

Enter Number:- 5

The result of Shifting 5 by two bits to the left is 20

The result of Shifting 5 by two bits to the right is 1

Question 15:- Program to use switch statement. display monday to sunday.

```
# Python doesn't have a direct switch statement like some other languages
def display_days(day_number):
```



```

days = {
    1: "Monday",
    2: "Tuesday",
    3: "Wednesday",
    4: "Thursday",
    5: "Friday",
    6: "Saturday",
    7: "Sunday"
}

if day_number in days:
    print(f"Day {day_number}: {days[day_number]}")
else:
    print("Invalid day number. Please enter a number between 1 and 7.")

```

```

day_number = int(input("Enter a day number (1-7): "))
display_days(day_number)

```

Enter a day number (1-7): 5

Day 5: Friday

Question 16:-Program to display arithmetic operator using switch case.

```

# Python doesn't have a direct switch statement like some other languages

def arithmetic_operation(operator, num1, num2):
    if operator == '+':
        return num1 + num2
    elif operator == '-':
        return num1 - num2
    elif operator == '*':

```

```

        return num1 * num2
    elif operator == '/':
        if num2 != 0:
            return num1 / num2
        else:
            return "Error: Division by zero"
    else:
        return "Invalid operator"

```

```

operator = input("Enter an arithmetic operator (+, -, *, /): ")
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
result = arithmetic_operation(operator, num1, num2)
print(f"{num1} {operator} {num2} = {result}")

```

```

Enter an arithmetic operator (+, -, *, /): +
Enter the first number: 56
Enter the second number: 43

```

```

56 + 43 = 99

```

Question 17:- Program to display first 10 natural number and their sum.

```

sum=0
print("This is First 10 Natural Number")
for i in range(1,11):
    sum=sum+i
    print(i)

print("This is Sum of First 10 Natural Number:-",sum)

```

```

This is First 10 Natural Number
1

```

2
3
4
5
6
7
8
9
10

This is Sum of First 10 Natural Number:- 55

Question 18:- Program to print stars sequence 1.

```
n=int(input("Enter Number,You want to print Stars:-"))
for i in range(1,n+1):
    for j in range(i):
        print("*", end="")
    print("")
```

Enter Number,You want to print Stars:- 5

```
*
**
***
****
*****
```

Question 19:- Program to print stars sequence 2.

```
n=int(input("Enter Number:-"))
for i in range(1,n+1):
    for j in range(i):
        print(i, end="")
    print("")
```

Question 20:- Program to print stars sequence 3.

```
n=int(input("Enter Number,You want to print Stars:-"))
for i in range(n,0,-1):
    for j in range(1,i+1):
        print(j, end="")
    print("")
```

12345

1234

123

12

1