HALF YEARLY EXAMINATION

SHIVALIK SCHOOL

WE FOSTER TALENT

C.S

# PROJECT


SUBMITTED BY-

SAUMIK VERMA

XI - A

SUBMITTED TO-

RAJESH MITTAL

# Question - 01

***AIM*** - WAP TO INPUT PRINCIPLE, RATE AND TIME AND CALCULATE SIMPLE INTEREST.

***OBJECTIVE*** - TO DEVELOP A PROGRAM THAT ACCEPTS INPUT VALUES FOR PRINCIPAL, RATE, AND TIME, THEN COMPUTES THE SIMPLE INTEREST USING THE FORMULA AND DISPLAYS THE RESULT TO THE USER.

**PROGRAM -**

prac1.py - C:/Saumik IDLE Python/prac1.py (3.13.5)

File Edit Format Run Options Window Help

```
p=int(input("Enter Pricipal amount"))
r=int(input("Enter Rate of Interest")
t=int(input("Enter Time"))
si=(p*r*t)/100
print('''Simple interest for
Pricipal amt''',p,'''
Rate of Interest''',r,'''
Time''',t,'''
is''',si)
```

**OUTPUT -**

```
Enter Pricipal amount6000
Enter Rate of Interest7
Enter Time2
Simple interest for
Pricipal amt 6000
Rate of Interest 7
Time 2
is 840.0
```

# Question - 02

***AIM*** - WAP TO INPUT RADIUS OF A CIRCLE AND CALCULATE THE AREA AND CIRCUMFERENCE.

***OBJECTIVE*** - TO DESIGN A PROGRAM THAT ENABLES THE USER TO ENTER THE RADIUS OF A CIRCLE, CALCULATES THE AREA AND CIRCUMFERENCE, AND DISPLAYS THE RESULTS CLEARLY.

**PROGRAM -**

prac2.py - C:/Saumik IDLE Python/prac2.py (3.13.5)

File Edit Format Run Options Window Help

```
r=int(input("Enter Radius of the circle"))
ar= 3.14*pow(r,2)
cir=2*3.14*r
print(''' Radius Value ''',r,'''
Area =''',ar,'''
Circumference ''',cir)
```

**OUTPUT -**

```
Enter Radius of the circle6
 Radius Value  6
Area = 113.04
Circumference  37.68
```

# Question - 03

***AIM*** **-** WAP TO INPUT ANY 2 NUMBERS AND FIND THE GREATER ONE.

***OBJECTIVE*** **-** TO WRITE A PROGRAM THAT TAKES TWO NUMBERS AS INPUT FROM THE USER AND DETERMINES WHICH ONE IS GREATER, THEN DISPLAYS THE GREATER NUMBER.

**PROGRAM -**

prac3.py - C:/Saumik IDLE Python/prac3.py (3.13.5)

File Edit Format Run Options Window Help

```
n1 = int(input("Enter first number: "))
n2 = int(input("Enter second number: "))
if n1>n2:
    print("The greater number is:", n1)
elif n2>n1:
    print("The greater number is:", n2)
else:
    print("Both numbers are equal.")
```

**OUTPUT -**

```
Enter first number: 79
Enter second number: 65
The greater number is: 79
```

# Question - 04

***AIM*** - WAP TO INPUT ANY INTEGER NO AND CHECK WHETHER IT IS POSITIVE OR NEGATIVE.

***OBJECTIVE*** - TO WRITE A PROGRAM THAT ACCEPTS AN INTEGER NUMBER FROM THE USER AND DETERMINES WHETHER THE NUMBER IS POSITIVE, NEGATIVE, OR ZERO.

**PROGRAM -**

prac4.py - C:/Saumik IDLE Python/prac4.py (3.13.5)

File Edit Format Run Options Window Help

```
n=int(input("Enter an integer number: "))
if n > 0:
    print("The number is positive.")
elif n < 0:
    print("The number is negative.")
else:
    print("The number is zero.")
```

**OUTPUT -**

```
========== RES
Enter an integer number: 845
The number is positive.

========== RES
Enter an integer number: -48
The number is negative.
```

# Question - 05

***AIM*** - WAP TO INPUT ANY INTEGER NO AND CHECK WHETHER IT IS EVEN OR ODD.

***OBJECTIVE*** - PYTHON PROGRAM THAT ACCEPTS AN INTEGER INPUT FROM THE USER AND CHECKS WHETHER THE NUMBER IS EVEN OR ODD. THIS PROJECT HELPS IN UNDERSTANDING THE USE OF CONDITIONAL STATEMENTS (IF-ELSE) AND THE CONCEPT OF MODULUS OPERATOR (%) IN PYTHON PROGRAMMING.

**PROGRAM -**

prac5.py - C:/Saumik IDLE Python/prac5.py (3.13.5)

File Edit Format Run Options Window Help

```
n = int(input("Enter an integer number: "))
if n % 2 == 0:
    print("The number is even.")
else:
    print("The number is odd.")
```

**OUTPUT -**

```
Enter an integer number: 84
The number is even.
```

# Question - 06

***AIM*** - WAP TO INPUT OBTAINED PERCENTAGE OF MARKS AND FIND THE RESULT ACCORDING TO:

PER < 33 - FAIL
PER >=33 AND PER <45 - THIRD
PER >=45 AND PER <60 - SECOND
PER >= 60 - FIRST

***OBJECTIVE*** - PYTHON PROGRAM THAT TAKES THE PERCENTAGE OF MARKS AS INPUT FROM THE USER AND DETERMINES THE DIVISION OR RESULT (FAIL, THIRD, SECOND, OR FIRST). THE PROJECT USES CONDITIONAL STATEMENTS (IF, ELIF, ELSE) TO APPLY LOGICAL DECISION-MAKING BASED ON THE INPUT.

**PROGRAM -**

prac6.py - C:/Saumik IDLE Python/prac6.py (3.13.5)

File Edit Format Run Options Window Help

```
percentage = int(input("Enter your percentage of marks: "))
if percentage < 33:
    print("Result: Fail")
elif percentage >= 33 and percentage < 45:
    print("Result: Third Division")
elif percentage >= 45 and percentage < 60:
    print("Result: Second Division")
else:
    print("Result: First Division")
```

**OUTPUT -**

```
Enter your percentage of marks: 89
Result: First Division
```

# Question - 07

***AIM*** - WAP TO PRINT ALL EVEN FROM 100 TO 2.

***OBJECTIVE*** - THE OBJECTIVE OF THIS PROGRAM IS TO PRINT ALL EVEN NUMBERS FROM 100 TO 2 IN REVERSE ORDER USING A FOR LOOP AND THE CONCEPT OF STEP VALUES IN PYTHON. THIS HELPS STUDENTS UNDERSTAND ITERATION AND CONDITIONS.

**PROGRAM -**

prac7.py - C:/Saumik IDLE Python/prac7.py (3.13.5)

File Edit Format Run Options Window Help

```
for num in range(100, 1, -2):
    print(num)
```

**OUTPUT -**

```
=======
100
98
96
94
92
90
88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
8
6
4
2
```

# Question - 08

***AIM*** - WAP TO PRINT THE TABLE OF THE GIVEN NO.

***OBJECTIVE*** - THE OBJECTIVE OF THIS PROJECT IS TO DEVELOP A PYTHON PROGRAM THAT TAKES AN INTEGER AS INPUT AND PRINTS ITS MULTIPLICATION TABLE FROM 1 TO 10. THIS ENHANCES UNDERSTANDING OF LOOPS AND ARITHMETIC OPERATIONS IN PYTHON.

**PROGRAM -**

prac8.py - C:/Saumik IDLE Python/prac8.py (3.13.5)

File Edit Format Run Options Window Help

```
num = int(input("Enter a number to print its table: "))
for i in range(1, 11):
    print(num, ' X ' ,i,' = ', i*num)
```

**OUTPUT -**

```
========== RESTART: C:/Sa
Enter a number to print its table: 2
2  X  1  =  2
2  X  2  =  4
2  X  3  =  6
2  X  4  =  8
2  X  5  =  10
2  X  6  =  12
2  X  7  =  14
2  X  8  =  16
2  X  9  =  18
2  X  10  =  20
```

# Question - 09

***AIM*** - WAP TO PRINT THE GIVEN PATTERN.

```
1
12
123
1234
12345
```

***OBJECTIVE*** - THE OBJECTIVE OF THIS PROGRAM IS TO PRINT A NUMBER PATTERN USING NESTED LOOPS IN PYTHON. IT HELPS STUDENTS UNDERSTAND HOW LOOPS CAN BE USED TO GENERATE PATTERNS.

**PROGRAM -**

prac9.py - C:/Saumik IDLE Python/prac9.py (3.13.5)

File Edit Format Run Options Window Help

```
for i in range(1, 6):
    for j in range(1, i + 1):
        print(j, end='')
    print()
```

**OUTPUT -**

```
1
12
123
1234
12345
```

# Question - 10

***AIM*** - WAP TO INPUT ANY NO. AND FIND THE SUM OF THE DIGITS OF THE GIVEN NO. (USE WHILE LOOP)

***OBJECTIVE*** - THE OBJECTIVE OF THIS PROGRAM IS TO TAKE A NUMBER AS INPUT AND CALCULATE THE SUM OF ITS DIGITS USING A WHILE LOOP. THIS PROGRAM HELPS STUDENTS UNDERSTAND LOOPS, ARITHMETIC OPERATIONS, AND DIGIT-WISE PROCESSING OF NUMBERS IN PYTHON.

**PROGRAM -**

prac10.py - C:/Saumik IDLE Python/prac10.py (3.13.5)

File Edit Format Run Options Window Help

```
n = int(input("Enter a number: "))
s = 0
x = n
while n > 0:
    d = n % 10
    s = s+d
    n = n // 10

print('Sum of digits of ',x, ' is ',s)
```

**OUTPUT -**

```
Enter a number: 15
Sum of digits of  15  is  6
```