

## **WEEK - 2**

### **Operators and Formatting Output**

1) Rohit wants to add the last digits of two given numbers. Write a program.

Input	Result
267 154	11
267 -154	11

```
n=abs(int(input()))
n1=abs(int(input()))
print(n%10+n1%10)
```

2) Write a program that returns the last digit of the given number. Last digit is being referred to as the least significant digit i.e. the digit in the ones (units) place in the given number.

Input	Result
197	7
-197	7

PROGRAM :

```
n=abs(int(input()))
print(n%10)
```

3) Complete the program to convert days into years, month and days. (Ignoring leap year and considering 1 month is 30 days)

Input	Result
375	YEARS: 1 MONTH: 0 DAYS: 10

```

d=int(input())
y=d//365
m=(d-y*365)//30
da=(d-y*365-m*30)
print("YEARS:",int(y),"MONTH:",m,'DAYS:',da)

```

4) A team from the Rotract club had planned to conduct a rally to create awareness among the Coimbatore people to donate blood. They conducted the rally successfully. Many of the Coimbatore people realized it and came forward to donate their blood to nearby blood banks. The eligibility criteria for donating blood are people should be above or equal to 18 and his/ her weight should be above 40. There was a huge crowd and staff in the blood bank found it difficult to manage the crowd. So they decided to keep a system and ask the people to enter their age and weight in the system. If a person is eligible he/she will be allowed inside.

Write a program and feed it to the system to find whether a person is eligible or not.

Input consists of two integers that correspond to the age and weight of a person respectively. Display True (IF ELIGIBLE) Display False (if not eligible)

Input	Result
18 40	False

```

a=int(input())
w=int(input())
if a>=18 and w>40:

```

```

        print("True")
else:
    print("False")

```

5) Write a program that returns the last digit of the given number. Last digit is being referred to the least significant digit i.e. the digit in the ones (units) place in the given number.

The last digit should be returned as a positive number.

For example,

if the given number is 197, the last digit is 7

if the given number is -197, the last digit is 7

Input	Result
197	7
-197	7

```

n=abs(int(input()))
print(n%10)

```

6) An online retailer sells two products: widgets and gizmos. Each widget weighs 75 grams. Each gizmo weighs 112 grams. Write a program that reads the number of widgets and the number of gizmos from the user. Then your program should compute and display the total weight of the parts.

Input	Result
10 20	The total weight of all these widgets and gizmos is 2990 grams.

PROGRAM:

```

w=int(input())

```

```
g=int(input())
print("The total weight of all these widgets and gizmos is “,w*75+g*112,”grams.”)
```

7) Write a program to find whether the given input number is Even.

If the given number is even, the function should return 2 else it should return 1.

Note: The number passed to the program can either be negative, positive or zero. Zero should be treated as Even.

Input	Result
100	2
1001	1

PROGRAM :

```
n=int(input())
if n==0:
    print(2)
elif n%2==0:
    print(2)
else:
    print(1)
```

8) Write a python program that takes a integer between 0 and 15 as input and displays the number of '1' s in its binary form.

Explanation: The binary representation of 3 is 011, hence there are 2 ones in it. so the output is 2.

Input	Result
-------	--------

3	2
---	---

```

n=int(input())
b=bin(n)
c=0
for i in b:
    if i=='1':
        c+=1
print(c)

```

9) In the 1800s, the battle of Troy was led by Hercules. He was a superstitious person. He believed that his crew can win the battle only if the total count of the weapons in hand is in multiple of 3 and the soldiers are in an even number of count. Given the total number of weapons and the soldier's count, Find whether the battle can be won or not according to Hercules's belief. If the battle can be won print True otherwise print False.

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

If the battle can be won print True otherwise print False.

Input	Result
32 43	False

PROGRAM :

```

w=int(input())
s=int(input())
if w%3==0 and s%2==0:
    print("False")

```

else:

```
    print("True")
```

10) Mr.Ram has been given a problem, kindly help him to solve it. The input of the program is either 0 or 1. IF 0 is the input he should display "C" if 1 is the input it should display "D". There is a constraint that Mr. Ram should use either logical operators or arithmetic operators to solve the problem, not anything else.

Hint: Use ASCII values of C and D.

Input	Result
0	C

PROGRAM :

```
A=int(input())
```

```
If A==0:
```

```
    print("C")
```

```
else:
```

```
    print("D")
```