

| | Input | Expected | Got | |
|---|--------------|---------------------------------|---------------------------------|---|
| ✓ | 450 | weekdays 10.38 weekend 0.38 | weekdays 10.38 weekend 0.38 | ✓ |
| ✓ | 500 | weekdays 10.00 weekend 0.00 | weekdays 10.00 weekend 0.00 | ✓ |
| ✓ | 10000 | weekdays 83.08 weekend 73.08 | weekdays 83.08 weekend 73.08 | ✓ |
| ✓ | 6789 | weekdays 58.38 weekend 48.38 | weekdays 58.38 weekend 48.38 | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

02- Operators in Python

Ex. No. : 2.1

Date:

Widgets and Gizmos

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.

Sample Input

10

20

Sample Output

The total weight of all these widgets and gizmos is 2990 grams.

For example:

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

PROGRAM:

```
a=int(input())
```

```
b=int(input())
```

```
print("The total weight of all these widgets and gizmos is",((a*75)+(b*112)),"grams.")
```

| | Input | Expected | Got |
|---|--------------|---|------------|
| ✓ | 10 20 | The total weight of all these widgets and gizmos is 2990 grams. | The to |

Passed all tests! ✓

Correct
Marks for this submission: 10.00/10.00.

Ex. No. : 2.2

Date:

Register No: 231501049

Name: GNAANESH B B

Doll Sings

In London, every year during Dasara there will be a very grand doll show. People try to invent new dolls of different varieties. The best-sold doll's creator will be awarded with a cash prize. So people broke their heads to create dolls innovatively. Knowing this competition, Mr.Lokpaul tried to create a doll that sings only when an even number is pressed and the number should not be zero and greater than 100.

IF Lokpaul wins print true, otherwise false.

Sample Input

10

Sample Output

True

Explanation:

Since 10 is an even number and a number between 0 and 100, True is printed

PROGRAM:

```
a=int(input())
if(a>0 and a<100 and a%2==0):
    print("True")
else:
    print("False")
```

| | Input | Expected | Got | |
|---|-------|----------|-------|---|
| ✓ | 56 | True | True | ✓ |
| ✓ | 101 | False | False | ✓ |
| ✓ | -1 | False | False | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No. : 2.3

Date:

Register No: 231501049

Name: GNAANESH B B

Birthday Party

Mr. X's birthday is in next month. This time he is planning to invite N of his friends. He wants to distribute some chocolates to all of his friends after the party. He went to a shop to buy a packet of chocolates. At the chocolate shop, 4 packets are there with different numbers of chocolates. He wants to buy such a packet which contains a number of chocolates, which can be distributed equally among all of his friends. Help Mr. X to buy such a packet.

Input Given:

N-No of friends

P1,P2,P3 AND P4-No of chocolates

OUTPUT:

"True" if he can buy that packet and "False" if he can't buy that packet.

SAMPLE INPUT AND OUTPUT:

5

25

12

10

9

OUTPUT

True False True False

PROGRAM:

```
a=int(input())
b=int(input())
c=int(input())
d=int(input())
e=int(input())
print(b%a==0,c%a==0,d%a==0,e%a==0)
```

| | Input | Expected | Got | |
|---|---------------------------|-----------------------|-----------------------|---|
| ✓ | 5 25 23 20 10 | True False True True | True False True True | ✓ |
| ✓ | 4 23 24 21 12 | False True False True | False True False True | ✓ |
| ✓ | 8 64 8 16 32 | True True True True | True True True True | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No. : 2.4

Date:

Register No: 231501049

Name: GNAANESH B B

Hamming Weight

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.(Hint:use python bitwise operator.

Sample Input

3

Sample Output:

2

Explanation:

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

PROGRAM:

```
a=int(input())
```

```
n=bin(a)
```

```
n=n.replace("0b","")
```

```
s=str(n)
```

```
c=list(s)
```

```
d=0
```

```
for i in range(len(c)):
```

```
if(int(c[i])==1):  
    d+=1  
  
print(d)
```

| | Input | Expected | Got | |
|---|-------|----------|-----|---|
| ✓ | 3 | 2 | 2 | ✓ |
| ✓ | 5 | 2 | 2 | ✓ |
| ✓ | 15 | 4 | 4 | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No. : 2.5

Date:

Register No: 231501049

Name: GNAANESH B B

Compound Interest

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn is paid at the end of the year, and is added to the balance of the savings account. Write a program that begins by reading the amount of money deposited into the account from the user. Then your program should compute and display the amount in the savings account after 1, 2, and 3 years. Display each amount so that it is rounded to 2 decimal places.

Sample Input:

10000

Sample Output:

Balance as of end of Year 1: \$10400.00.

Balance as of end of Year 2: \$10816.00.

Balance as of end of Year 3: \$11248.64

PROGRAM:

```
a=int(input())
b=(a*0.04)+a
c=b+(b*0.04)
d=c+(c*0.04)

print("Balance as of end of Year 1: ${:.2f}.".format(b))
print("Balance as of end of Year 2: ${:.2f}.".format(c))
print("Balance as of end of Year 3: ${:.2f}.".format(d))
```

| | Input | Expected | Got |
|---|-------|--|---|
| ✓ | 10000 | Balance as of end of Year 1: \$10400.00. Balance as of end of Year 2: \$10816.00. Balance as of end of Year 3: \$11248.64. | Balance as of end of Year 1: \$ Balance as of end of Year 2: \$ Balance as of end of Year 3: \$ |
| ✓ | 20000 | Balance as of end of Year 1: \$20800.00. Balance as of end of Year 2: \$21632.00. Balance as of end of Year 3: \$22497.28. | Balance as of end of Year 1: \$ Balance as of end of Year 2: \$ Balance as of end of Year 3: \$ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No. : 2.6

Date:

Register No: 231501049

Name: GNAANESH B B

Eligible to donate blood

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 Format:

Input consists of two integers that correspond to the age and weight of a person respectively.

Output Format:

Display True(IF ELIGIBLE)

Display False (if not eligible)

Sample Input

19

45

Sample Output

True

PROGRAM:

```
a=int(input())  
b=int(input())  
if(a>=18 and b>40):  
    print("True")  
else:  
    print("False")
```

| | Input | Expected | Got | |
|---|----------|----------|-------|---|
| ✓ | 19 45 | True | True | ✓ |
| ✓ | 18 40 | False | False | ✓ |
| ✓ | 18 42 | True | True | ✓ |
| ✓ | 16 45 | False | False | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Ex. No. : 2.7

Date:

Register No: 231501049

Name: GNAANESH B B

C or D

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 Format:

An integer x, $0 \leq x \leq 1$. .

Output Format:

output a single character "C" or "D"depending on the value of x.

Input 1:

0

Output 1:

C

Input 2:

1

Output 1:

D

PROGRAM:

```
a=int(input())
```

```
if(a==0):
```

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

```
else:
```

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

OUTPUT:

| | Input | Expected | Got | |
|---|-------|----------|-----|---|
| ✓ | 0 | C | C | ✓ |
| ✓ | 1 | D | D | ✓ |

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.