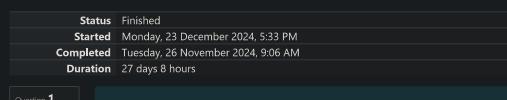
# GE23131-Programming Using C-2024





Question 1
Correct
Marked out of 3.00
F Flag question

Alice and Bob are playing a game called "Stone Game". Stone game is a two-player game. Let player can remove either one stone or four stones. The player who picks the last stone, wins. is always the one to make the first move. Your task is to find out whether Alice can win, if bot

Input Format

First line starts with T, which is the number of test cases. Each test case will contain N number

**Output Format** 

Print "Yes" in the case Alice wins, else print "No".

Constraints

1<=T<=1000

1<=N<=10000

Sample Input and Output

Input

- 3
- 1
- 6
- 7

Output

Yes

Yes

No

**Answer:** (penalty regime: 0 %)

```
#include<stdio.h>

int main()

int t,n;

scanf("%d",&t);

while(t>0)
```

Input	Expected	Got	
3 1 6 7	Yes Yes No	Yes Yes No	

Passed all tests!

Question **2**Correct
Marked out of 5.00

Flag question

You are designing a poster which prints out numbers with a unique style applied to each of the closed paths or holes present in a given number.

The number of holes that each of the digits from 0 to 9 have are equal to the number of close

1, 2, 3, 5, and 7 = 0 holes.

0, 4, 6, and 9 = 1 hole.

8 = 2 holes.

Given a number, you must determine the sum of the number of holes for all of its digits. For

Complete the program, it must must return an integer denoting the total number of holes in

Constraints

1 ≤ num ≤ 109

Input Format For Custom Testing

There is one line of text containing a single integer num, the value to process.

Sample Input

630

Sample Output

2

Explanation

Add the holes count for each digit, 6, 3 and 0. Return 1 + 0 + 1 = 2.

Sample Input

1288

Sample Output

4

Explanation

Add the holes count for each digit, 1, 2, 8, 8. Return 0 + 0 + 2 + 2 = 4.

Answer: (penalty regime: 0 %)

Г	Input	Expected	Got
	630	2	2
	1288	4	4

Passed all tests!

Question **3**Correct
Marked out of 7.00

Flag question

The problem solvers have found a new Island for coding and named it as Philaland. These sm of items at the Island easier by distributing various coins with different values. Manish has co category starting from \$1 till the maximum price of the item present on Island, then we can pexample to prove his point.

Let's suppose the maximum price of an item is 5\$ then we can make coins of {\$1, \$2, \$3, \$4, \$2, \$3, \$4, \$5}.

Now Manisha, being a keen observer suggested that we could actually minimize the number distribution {\$1, \$2, \$3}. According to him any item can be purchased one time ranging from them. Your task is to help Manisha come up with a minimum number of denominations for a

**Input Format** 

## **Output Format**

Print a single line denoting the minimum number of denominations of coins required.

#### **Constraints**

```
1<=T<=100
1<=N<=5000
```

Refer the sample output for formatting

Sample Input 1:

10

## Sample Output 1:

4

Sample Input 2:

5

Sample Output 2:

3

# **Explanation:**

For test case 1, N=10.

According to Manish (\$1, \$2, \$3,... \$10) must be distributed.

But as per Manisha only  $\{\$1, \$2, \$3, \$4\}$  coins are enough to purchase any item ranging from denominations could also be  $\{\$1, \$2, \$3, \$5\}$ . Hence answer is still 4.

For test case 2, N=5.

According to Manish {\$1, \$2, \$3, \$4, \$5} must be distributed.

But as per Manisha only  $\{1, 2, 3\}$  coins are enough to purchase any item ranging from \$1 denominations could also be  $\{1, 2, 4\}$ . Hence answer is still 3.

**Answer:** (penalty regime: 0 %)

```
1  #include<stdio.h>
2
3  int main()
4  {
5    int n, ct=0, den=1;
6    scanf("%d", &n);
7    while(den<=n)
8    {
9    ct++;</pre>
```

