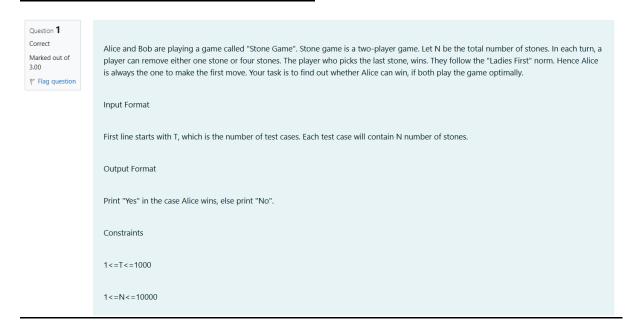
Week-04-Decision Making and Looping - while, do...while and for



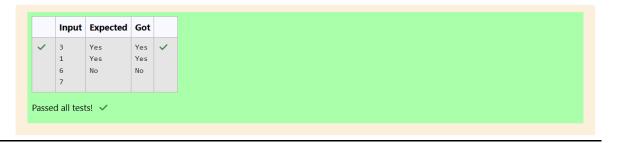
Week-04-01-Practice Session-Coding



Source code:

```
#include<stdio.h>
 2
    int main()
 3 •
    {
         int N,T;
scanf("%d",&T);
while(T--)
4
 5
 6
 7
             scanf("%d\n",&N);
 8
             int R=N/4;
9
             if((R%2==0 && N%2==1) || (R%2==1 && N%2==0))
10
11
12
                  printf("Yes\n");
13
14
             else
15
             {
                  printf("No\n");
16
17
18
19
         return 0;
20
21
```

Result:



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 them. The styling is based on the number of 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 closed paths in the digit. Their values are:

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 example, the number 819 has 3 holes.

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

Constraints

1 ≤ num ≤ 109

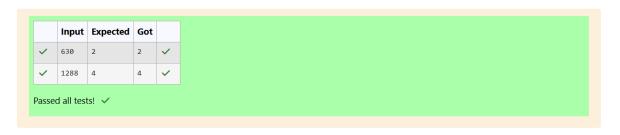
Input Format For Custom Testing

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

Source code:

```
#include<stdio.h>
    int main()
 2
 3 •
     {
        int num,rem,holes=0;
scanf("%d",&num);
4
5
         while(num!=0)
6
 7
             rem=num%10;
 8
             if(rem==1 || rem==2 || rem==3 || rem==5 || rem==7)
9
10
11
                 holes+=0;
12
13
             else if(rem==0 || rem==4 || rem==6 || rem==9)
14
             {
15
                 holes+=1;
16
             else
17
18
             {
                 holes+=2;
19
20
             num/=10;
21
22
         printf("%d",holes);
23
24
         return 0;
25
```

Result:



Question **3**Correct
Marked out of 7.00

F Flag question

The problem solvers have found a new Island for coding and named it as Philaland. These smart people were given a task to make a purchase of items at the Island easier by distributing various coins with different values. Manish has come up with a solution that if we make coins category starting from \$1 till the maximum price of the item present on Island, then we can purchase any item easily. He added the following example to prove his point.

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

Now Manisha, being a keen observer suggested that we could actually minimize the number of coins required and gave following distribution {\$1, \$2, \$3}. According to him any item can be purchased one time ranging from \$1 to \$5. Everyone was impressed with both of them. Your task is to help Manisha come up with a minimum number of denominations for any arbitrary max price in Philaland.

Input Format

Contains an integer N denoting the maximum price of the item present on Philaland.

Output Format

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

Constraints

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

Source code:

```
#include<stdio.h>
int main()
{
    int max,c=1,d=0;
    scanf("%d",&max);
    while(max>0)
    {
        d++;
        max-c;
        l0   c*=2;
        l1
        ppintf("%d",d);
        return 0;
}
```

Result:

