Grading Students

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Problem	Submissions	Leaderboard	Discussions

HackerLand University has the following grading policy:

- Every student receives a *grade* in the inclusive range from 0 to 100.

- Any *grade* less than 40 is a failing grade.

Sam is a professor at the university and likes to round each student's *grade* according to these rules:

- If the difference between the *grade* and the next multiple of 5 is less than 3, round *grade* up to the next multiple of 5.

- If the value of *grade* is less than 38, no rounding occurs as the result will still be a failing grade.

For example, *grade* $= 84$ will be rounded to 85 but *grade* $= 29$ will not be rounded because the rounding would result in a number that is less than 40.

Given the initial value of *grade* for each of Sam's n students, write code to automate the rounding process. For each $grade_i$, round it according to the rules above and print the result on a new line.

Input Format

The first line contains a single integer denoting n (the number of students).
Each line i of the n subsequent lines contains a single integer, $grade_i$, denoting student i's grade.

Constraints

- $1 \leq n \leq 60$

- $0 \leq grade_i \leq 100$

Output Format

For each $grade_i$ of the n grades, print the rounded grade on a new line.

Sample Input 0

```
4
73
67
38
33
```

Sample Output 0

```
75
67
40
33
```

Explanation 0

ID	Original Grade	Final Grade
1	73	75
2	67	67
3	38	40
4	33	33

1. Student 1 received a 73, and the next multiple of 5 from 73 is 75. Since $75 - 73 < 3$, the student's grade is rounded to 75.

2. Student 2 received a 67, and the next multiple of 5 from 67 is 70. Since $70 - 67 = 3$, the grade will not be modified and the student's final grade is 67.

3. Student 3 received a 38, and the next multiple of 5 from 38 is 40. Since $40 - 38 < 3$, the student's grade will be rounded to 40.

4. Student 4 received a grade below 38, so the grade will not be modified and the student's final grade is 33.

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Contest ends in 8 hours

Submissions: 6725
Max Score: 10
Difficulty: Easy

Rate This Challenge:
★★★★★

More

Current Buffer (saved locally, editable)   C#

```csharp
1  using System;
2  using System.Collections.Generic;
3  using System.IO;
4  using System.Linq;
5  class Solution {
6
7      static void Main(String[] args) {
8          //int n = 4;
9              int n = int.Parse(Console.ReadLine());
10
11             //int[] grade = { 73, 67, 38, 33 };
12             //int x = 0;
13
14             while (n-- > 0)
15             {
16                 //int g = grade[x++];
17                 int g = int.Parse(Console.ReadLine());
18
19                 if (g < 38)
20                 {
21                     Console.WriteLine(g);
22                 }
23                 else
24                 {
25                     int nextMult5 = g;
26
27                     while (nextMult5 % 5 != 0)
28                     {
29                         nextMult5++;
30                     }
31
32                     if (nextMult5 - g < 3)
33                     {
34                         Console.WriteLine(nextMult5);
35                     }
36                     else
37                     {
38                         Console.WriteLine(g);
39                     }
40                 }
41
42             }
43
44     }
45 }
46
```

Line: 41 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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