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Grading Students

Problem

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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 $\bf 5$ is less than $\bf 3$, round grade up to the next multiple of $\bf 5$.
- 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.

Function Description

Complete the function *gradingStudents* in the editor below. It should return an integer array consisting of rounded grades.

gradingStudents has the following parameter(s):

• grades: an array of integers representing grades before rounding

Input Format

The first line contains a single integer, n, the number of students.

Each line i of the n subsequent lines contains a single integer, grades[i], denoting student i's grade.

Constraints

- $1 \le n \le 60$
- $0 \leq grades[i] \leq 100$

Output Format

For each grades[i], print the rounded grade on a new line.

Sample Input 0

- 4
- 73
- 67
- 38
- 33

Sample Output 0

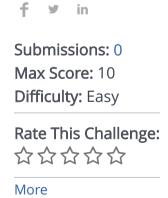
- 75
- 67

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



Python 3





```
#!/bin/python3
   import math
   import os
   import random
   import re
    import sys
 8
 9
    # Complete the 'gradingStudents' function below.
10
11
12
   # The function is expected to return an INTEGER ARRAY.
   # The function accepts INTEGER_ARRAY grades as parameter.
14
15
16 ▼def gradingStudents(grades):
       for x,i in enumerate(grades):
17 ₹
            if(i>=38) and (i%5)>=3:
18 ₹
19
                grades[x]=i+5-(i%5)
20
       return (grades)
21
22 vif __name__ == '__main__':
       fptr = open(os.environ['OUTPUT PATH'], 'w')
23
24
25
        grades_count = int(input().strip())
26
27
       grades = []
28
29 ₹
       for _ in range(grades_count):
            grades item = int(input().strip())
30
            grades.append(grades_item)
31
32
33
       result = gradingStudents(grades)
34
35
        fptr.write('\n'.join(map(str, result)))
        fptr.write('\n')
36
```

37 38 39	<pre>fptr.close()</pre>		
			Line: 1 Col: 1
<u> ♣</u> <u>Uploa</u>	ad Code as File Test against custom input	Run Code	Submit Code
Testcase	0 🗸		
	atulations, you passed the sample test case. e Submit Code button to run your code against all the test cases. edin)		
4 73 67 38 33			
	tput (stdout)		
75 67 40 33			
Expected	d Output		
75 67			

40 33

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