# **Grading Students**



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  ${f 5}$  is less than  ${f 3}$ , round grade up to the next multiple of  ${f 5}$ .
- ullet If the value of grade is less than 38, no rounding occurs as the result will still be a failing grade.

### **Examples**

- grade = 84 round to 85 (85 84 is less than 3)
- grade = 29 do not round (result is less than 40)
- grade = 57 do not round (60 57 is 3 or higher)

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.

gradingStudents has the following parameter(s):

• int grades[n]: the grades before rounding

#### Returns

• int[n]: the grades after rounding as appropriate

#### 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].

## **Constraints**

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

# Sample Input 0

4 73 67

# 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 33, so the grade will not be modified and the student's final grade is 33.