# **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  $\bf 5$  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.

# 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

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

# Sample Input 0

- 4
- 73
- 67
- 38
- 33

## Sample Output 0

# Explanation 0

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

- 1. Student  $\bf 1$  received a  $\bf 73$ , and the next multiple of  $\bf 5$  from  $\bf 73$  is  $\bf 75$ . Since  $\bf 75 \bf 73 < \bf 3$ , the student's grade is rounded to  $\bf 75$ .
- 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  $\bf 3$  received a  $\bf 38$ , and the next multiple of  $\bf 5$  from  $\bf 38$  is  $\bf 40$ . Since  $\bf 40 \bf 38 < \bf 3$ , the student's grade will be rounded to  $\bf 40$ .
- 4. Student 4 received a grade below 33, so the grade will not be modified and the student's final grade is 33.