# **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 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.

#### **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
- 20
- 33

## Sample Output 0

7 5			
1 1 3			
67			
0 /			
10			
40			
75 67 40 33			
0.0			
1 3 3			
33			

## 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 **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  $\mathbf{4}$  received a grade below  $\mathbf{33}$ , so the grade will not be modified and the student's final grade is  $\mathbf{33}$ .