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

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 $\bf 1$ 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 $\mathbf{40} \mathbf{38} < \mathbf{3}$, 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**.