

Economics Students (e)

Problem Description

N students took a course on economics and $m_1, m_2, m_3, \dots, m_n$ represent marks of students 1 to N.

Output a histogram (frequency of marks) with ranges [0, 9], [10, 19], [90, 99], [100]

Input format

First line contains a integer N. Second line contains N integers representing marks of each student.

N
 $m_1, m_2, m_3, \dots, m_n$

Output format

Output 11 space separated integers describing frequency of marks in respective range as described in the problem

Error handling

Marks should be in range [0,100], if not print (without quotes) "INVALID INPUT", ensure that there are no additional spaces and that text is in **Upper case**.

Constraints

$1 \leq N \leq 1e5$
 $0 \leq m_i \leq 1e9$

Sample input 1

5
10 30 40 60 70

Sample output 1

0 1 0 1 0 0 2 1 0 0 0

Sample Input 2

5
101 30 40 60 70

Sample Output 2

INVALID INPUT