1. You are given an unsorted array of N elements and a second array of Q queries. In each query you will be given a number k. You need to find the number which is the smallest among all numbers in the array which are greater than or equal to k.

   1 <= N <= 10^3 (for N^2 sort)
   1 <= N <= 10^5 (for NlonN sort)
   1 <= Q <= 10^5

2. Given an array A of size N, where each element is distinct and represents the length of a side, please find whether you can choose three elements such that they can form a non-degenerate triangle.

   1 <= N <= 10^5

3. There is a grid of size M*N. Each grid cell has cost associated to it. You can start from any cell in the first row. You want to go to any cell in the last row. From cell (i, j), you can go to one of the cells (i+1, j), (i+1, j - 1), (i+1, j + 1) i.e. neighbors in the next row. Each cell you go through, you have to pay cost associated to it. Find the minimum cost to go from first row to last row.
   [Optional: Also print the path which gives minimum cost.]

   Input :
   First line will have T - number of test cases, followed by the T test cases.
   For each test case, first line will contain M and N - size of grid, followed by M lines, each having N space separated integers. jth integer in ith line denotes the cost for (i, j) cell.

   Output:
   For each case output the minimum cost to reach from first row to last row.

   Constraints:
   1 <= T <= 10
   1 <= M, N <= 1000
   1 <= cost of each cell <= 10^9

   Sample Input :
   2
   3 3
   3 6 2
   1 2 4
   6 3 4
   4 3
   2 4 1 3
   3 2 5 1
   1 2 6 3

   Sample Output:
   7
   5

4. Write a Function in C which takes 2 2D arrays as input parameters and prints the product of these two arrays (Matrix Multiplication).