Problem 5. Groups

You are given a plane with N points with integer coordinates in it. You can group the points in a way that the distance between each pair of them is more than K. Your task is to write a program **groups**, that computes the maximum number of groups you can make.

**Input**: The first line of the input file **groups.in** contains a single integer N. The following N lines contain two integers in range of (0-10000) - the coordinates of the given points. The last line contains a single integer - К.

**Output:** In the output file **groups.out** you should print the desired maximal number of groups you can make.

**Constraints**:

1 N,K10000

**Example:**

|  |  |
| --- | --- |
| **groups.in** | **groups.out** |
| 8  41 8467  6334 6500  9169 5724  1478 9358  6962 4464  5705 8145  3281 6827  9961 491  3005 | 3 |