

A file specifies an electric board on which a certain number of devices (e.g., resistors, diodes, etc.) are placed along a **straight line**. Among these components, the string "gnd" represents the electric ground. As the designer wants each component as close as possible to a ground sink, he/she must write a C function to evaluate this distance in the following way.

The first line of the file specifies the number of components plus the number of ground points. Each component is reported on a different line, and it is followed by a number reporting its position along the straight line, i.e., the distance (number of millimeters) from it and the origin of the line. The distance between any two components is given by the difference of their distances with respect to the origin of the straight line. The following is an example of such a file:

```
4 2
gnd 0
resistor 35
diode 60
transistor 78
gnd 94
inductor 112
```

Write function **minDist** which receives the file name as a parameter and it returns the sum of the distances from **every** component to the **closest** gnd point. In other words, for each component (notice that ground points gnd are not components) the function must compute the distance to the closest ground point. Then, it must sum the minimum distance for all components and return it.

In the previous case, the components have the following distance from the closest gnd point: 35 (resistor), 34 (diode), 16 (transistor), and 18 (inductor). The program must return the sum of these values.