Please read carefully the problem statement, and
examine the data file before you start
programming.

Problem Statement: Hot or cold it is.

Storing temperature sensitive materials is a delicate task. You need rooms or closets which would support **heating**, ventilation and air conditioning (i.e. **cooling** and humidity control). One such material is chemicals for drug production. Lunapharma fabricates some very delicate chemicals from moondust. These chemicals need to be stored between 8 and 16 degrees Celcius. Therefore if the temperature outside is less than 8 degrees, heating should kick in, and if it is more than 16 degrees outside cooling should kick in.

Lunapharma is considering a facility investment in Schiphol, Netherlands. Here is the business data problem:

- They need to estimate total heating cost. This is a function of accumulated temperature difference. For any day colder than 8 degrees, they add the difference to a total.
- They also need to estimate total cooling cost. This is also a function of accumulated temperature difference.

The table below illustrates the point mechanism.

Observed Temperature	Heating Cost	Cooling Cost
-5 degrees	13 points	None
12 degrees	None	None
28 degrees	None	12 points

To estimate total points for a year, they have obtained annual temperature data set for the years 1951 to 2018. They simply want to process this data set and **see the average points for a year**. This would be a baseline for their annual heating and cooling cost.

The data set is in a file called Schiphol.txt. Please process this file and as output show the two totals (one for heating, the other for cooling).

Some notes on grading:

1. You must have functions to de-clutter your code. **If you do not have functions, you will be given a 20 point penalty.**
2. First suggestions would be one function to process the file and return a data set appropriate for the rest of your code (i.e. a dataframe, a list, or an array). **Hint:** Check first to see how the file is formatted (i.e. comma-separated, tab-separated, spaces, etc).
3. Another suggested function would be one or two simple functions to process a single entry in the data set, and calculate the points for heating and cooling. **Hint:** Python functions can return multiple values, so a single function could also eb defined.
4. Please do write comments (i.e. lines starting with #) explaining your code. **If you do not have comments, you will be given a 5 point penalty.**

Good Luck!