

CS150 Intro to CS I

Fall 2017

Input file review

Suppose that a text file (cities.txt) contains the names of cities and their average temperature for October. The last line contains xxxxxx to indicate the end of the file: (from www.infoplease.com/ipa/A0762183.html)

```
Denver 51.0  
Fargo 49.3  
Las_Vegas 68.7  
Portland 54.3  
Tucson 70.5  
xxxxxxx
```

Write a program that will read in the information, then display to the user the name of the city with the highest average temperature in October.

Chapter 5

do-while

- Reading: 5.5 (pp. 242-247)
- Good Problems to Work: p. 246 5.5

do-while loop

- do-while is
 1. another repetition structure
 2. is a post-test loop that executes one or more times
 3. is used many times to validate data input by the user
- general form

```
do
{
    // statements
} while (logical expression) ;
```

Input Validation

- Ask the user to enter a year. Valid years are greater than 0.

```
do
{
    cout << "Enter a year:" << endl;
    cin >> year;
} while (year <= 0);
```

Practice

- Write C++ statements that will read in integers from the user until the user inputs -1.

Practice

- Ask the user for an even integer greater than 100. Keep asking until valid input is given.

Practice

- Ask the user for a capital letter. Keep asking until you get valid input.

Practice

- Write a program segment that displays the following menu:

S)ave

E)dit

Q)uit

Select:

- If the user does not enter a valid selection ('S', 's', 'E', 'e', 'Q', 'q') then display the menu again. Continue doing so until the user enters a valid menu choice.