**CS173: Intermediate Computer Science**

**Reading 4**

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Read the assigned pages below from our course textbook. Submit your work by the assigned deadline on the Canvas course page or in class. Responses may be neatly handwritten or typed. **Put your name at the top!**

Readings: From the course textbook please read Chapter 4 – you may skip the section on GUIs.

You should come away with understanding:

* how input and output work in a C++ program
* how to open and read/write files in C++

**1) What type are cin and cout and where are they declared?**

**2) Explain the purpose of the “reading marker” and its role in parsing an input stream.**

**3) What role does the ignore function play in parsing input streams?**

**4) When we normally read a string value using cin we get the group of characters separated by spaces. How do we read an entire line of text into a single string variable?**

**5) Write a C++ program that opens a file called temperatures.dat. The program should read six temperatures (floats) from the file and output the average temperature. Write or copy & paste your solution here.**

**6) Briefly explain the design philosophies of functional decomposition and object-oriented programming (be specific about what each approach entails):**