The main obstacles that I overcame were making sure that the program output for the total bill was a dollar value with precision of two places after the decimal point, and making sure that the program did not take in an empty string as the customer name. The first issue was fixed easily because I was immediately aware of the exact problem. All I had to do was research how to print a value with 2 values after the decimal point, which was fairly straightforward. The second issue was more complex because it was harder to trace the issue in the code. I re-read the project specifications and noticed the link to the “Some Things About Strings” page, where I saw the example that contained the cin.ignore() statement. Implementing this statement fixed the problem.

A list of the test data that could be used to thoroughly test my program is as follows:

1. Negative initial meter reading (-200, 500, Rehan, 3)
2. Final meter reading less than the initial reading (90, 80, Rehan, 3)
3. Empty string provided for the customer name (90, 91,\*return key\*, 6)
4. Month number not an integer between 1 and 12 inclusive (90, 91, Rehan, 13)
5. High season, with usage under 43 HCF (5, 10, Rehan, 6)
6. High season, with usage equal to 43 HCF (5, 48, Rehan, 6)
7. High season, with usage over 43 HCF (5, 100, Rehan, 6)
8. Low season, with usage under 29 HCF (5, 10, Rehan, 1)
9. Low season, with usage equal to 29 HCF (5, 34, Rehan, 1)
10. Low season, with usage over 29 HCF (5, 50, Rehan, 1)

My program handles all of these test cases correctly.