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CS Project 2 Report

1. The obstacles that I overcame are many. One of them is my mistakenly using *char* for energy efficient home’s answer. When I type a word “you,” the program accepts the input that should be invalid. Therefore, I changed the type for energy efficient home from *char* to *string*. Other obstacles mainly lie in the if-statements. I need to figure out the correct logic for different inputs. I have to prevent some if-statements overwrite others. Thus, the order of the if-statements became fairly important.
2. List of data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Trials | Years as customer | Energy Efficient Home | Residential City | Number of giggawatts used | |
| 1) | -1 | N/A | N/A | N/A | |
| 2) | 1 | B | N/A | N/A | |
| 3) | 1 | you | N/A | N/A | |
| 4) | 1 | 12 | N/A | N/A | |
| 5) | 1 | Y | N/A | N/A | |
| 6) | 1 | y | *“press Enter”* | N/A | |
| 7) | 1 | n | LA | 2 | |
| 8) | 1 | n | LA | 3 | |
| 9) | 1 | y | LA | 2 |
| 10) | 1 | y | LA | 3 |
| 11) | 4 | y | LA | 2 |
| 12) | 4 | y | LA | 3 |
| 13) | 4 | n | LA | 3 |
| 14) | 10 | y | LA | 2 |
| 15) | 10 | y | LA | 3 |
| 16) | 10 | n | LA | 2 |

I have tried type in different input for 16 times. For trial 1 through 6, I intentionally typed invalid input to check if the error message match my expectations. For trial 1, I typed -1 for years as customer, which shouldn’t be negative. For trial 2 to 5, I typed in different strings, numbers and characters for energy efficient home, the inputs of which should only be either ‘y’ or ‘n.’ For trial 7 through 16, I typed in inputs for different conditions, checking the amount of bill.