|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Minutes | Text Messages | Name | Month Number | Reason | Pass? |
| 600 | 183 | Alex | 12 | Minutes>500 | √ |
| 483 | 245 | Bryan | 7 | 200<SMS<=400 & month between June and Sept. | √ |
| 501 | 308 | Mike Bill | 1 | 200<SMS<=400 & month is Oct. through May | √ |
| 532 | 600 | H S | 10 | SMS>500 | √ |
| -1 | 400 | 123 | 9 | Minutes<0 | √ |
| 300 | -200 | 456 | 8 | SMS<0 | √ |
| 300 | 400 |  | 7 | No name input | √ |
| 300 | 400 | Yunong | 13 | Month not between 1 and 12. | √ |
| -1 | -2 | -3 | -4 | Minutes, SMS and Month input are all out of rule. | √ |
| 300 | 400 |  | 10 | Name is consisted of spaces. | √ |
| 10000000 | 1000000000 | John Williams | 5 | Large data | √ |

1. The notable obstacle I overcame is how to organize all the information systematically. There are a lot of conditions to consider. I need to extract useful information from the description and transform it to programming language. One of my goals is to use as few “if” sentence as I can, and I realized it by preprocessing the data and using the “variable = (condition) ? value1 : value2” sentence to make the program seem more succinct and orderly.