

## Xilun Guo

**Understanding the problem:** This problem is about letting the user input a string of chars, then make a program to change those chars to number in binary. Also, letting the user input a string of 0s and 1s number. Before turning them into ASCII value, the program should be able to check the user\_input are 1s or 0s only, % 8 is 0, and after changing to the dec can't greater than 127 or smaller than 0.

**Devising a plan:** Step 1: Ask the user input a string of any chars. Step 2: Changing the user\_input to decimal and then, change the decimal to binary. Step 3: Ask the user input a string of 0s or 1s only number. Step 4: Checking the user\_input is 0s or 1s only or not, % 8 is 0, and after changing to the dec can't greater than 127 or smaller than 0. Step 5: Printing out the chars, which changed from the user\_input by ASCII value.

### Testing:

#### Part1:

Char	Expected	Actual
Jen	011010100110010101101110	Yes
Guo,Xilun		Yes
010001110111010101101111010110001000000101100001101001011011000111010101101110		

#### Part 2:

Binary	Expected	Actual
abc	Invalid Input, Enter a string of 1s and 0s number:	Yes
0101010	Invalid Input, Enter a string of 1s and 0s number:	Yes
10101010	Invalid Input, Enter a string of 1s and 0s number:	Yes
12345678	Invalid Input, Enter a string of 1s and 0s number:	Yes
0110011001010101	fU	Yes

