```
1
    #While Loops Challenge 27: Even Odd Number Sorter App
 3
    print("Welcome to the Even Odd Number Sorter App")
 5
    running = True
    #Run the program as longs as the user wants
 7
 8
    while running:
 9
        #Get user input
10
        num string = input("\nEnter in a string of numbers separated by a comma (,) :
    ")
        num_string = num_string.replace(' ', '')
11
        num list = num string.split(",")
12
13
        #Initialize lists to hold even/odd values
14
        evens = []
15
        odds = []
16
17
        #Calculate whether the number is even or odd
18
        print("\n---- Result Summary ----")
19
        for number in num_list:
20
            number = int(number)
21
             if number % 2 == 0:
22
                 evens.append(number)
23
                 print("\t" + str(number) + " is even!")
24
25
26
                 odds.append(number)
                 print("\t" + str(number) + " is odd!")
27
28
        #Sort the lists evens and odds
29
        evens.sort()
30
31
        odds.sort()
32
        #Show the even numbers
33
34
        print("\nThe following " + str(len(evens)) + " numbers are even: ")
35
        for even in evens:
            print("\t" + str(even))
36
37
38
        #Show the odd numbers
        print("\nThe following " + str(len(odds)) + " numbers are odd: ")
39
         for odd in odds:
40
            print("\t" + str(odd))
41
42
        #Quit the program if the user does not enter in 'y'
43
        choice = input("\nWould you like to run the program again (y/n): ").lower()
44
        if choice != 'y':
45
46
             running = False
             print("Thank you for using the program. Goodbye.")
47
```