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1  #While Loops Challenge 26: Factor Generator App
2
3  print("Welcome to the Factor Generator App")
4
5  running = True
6
7  #Run the program until the user quits
8  while running:
9      #Get user input
10     number = int(input("\nEnter a number to determine all factors of that number:
11     "))
12
13     #Find the factors of the user's given number
14     factors = []
15     for i in range(1, number+1):
16         if number % i == 0:
17             factors.append(i)
18
19     #Print out the factors
20     print("\nFactors of " + str(number) + " are: ")
21     for factor in factors:
22         print(factor)
23
24     #Print a summary of the factors mathematically
25     print("\nIn summary: ")
26     for i in range(int(len(factors)/2)):
27         print(str(factors[i]) + " * " + str(factors[-i-1]) + " = " + str(number))
28
29     #Ask the user if they would like to quit
30     choice = input("\nRun again (y/n): ").lower()
31     if choice != 'y':
32         running = False
33         print("Thank you for using the program. Have a great day.")

```