**20. Sum of all digits using while loop (n=123 output:1+2+3=6)**

**PROGRAM:**

#include <iostream>

using namespace std;

int main() {

int n, sum = 0;

cout << "Enter a number: ";

cin >> n;

int originalNumber = n;

while (n != 0) {

int digit = n % 10;

sum += digit;

n /= 10;

if (n != 0) {

cout << digit << " + ";

} else {

cout << digit << " = ";

}

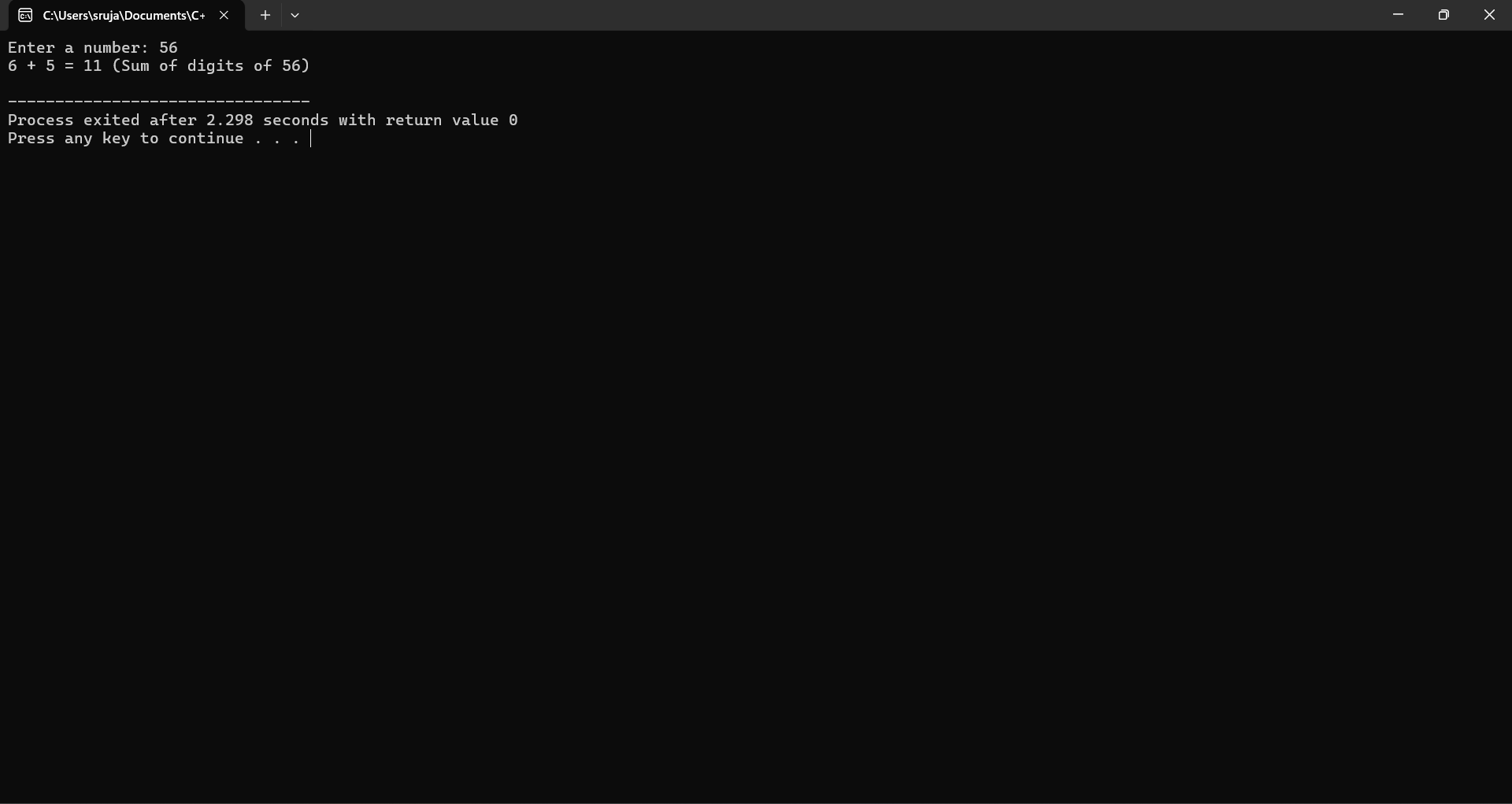
}

cout << sum << " (Sum of digits of " << originalNumber << ")" << endl;

return 0;

}

**OUTPUT:**

****