Q1. Write a C++ program that takes an integer as input and calculates the sum of all of its digits.

E.g. 564 🡪 15

404 🡪 8

Q2. Implement a calculator. The program starts with a menu:

1. Add (adds 2 numbers taken as input and prints the results)
2. Divide (divide 2 numbers taken as input and prints the results)
3. Magnitude (prints the magnitude of a number e.g 5 has magnitude 5 and -6 has magnitude 6)
4. Factorial (calculates the factorial of a number taken as input and prints the results)
5. Exit

The program only terminates when 5 is pressed. The user can perform various operations by selecting them from the menu. Suppose user presses 1. Then the following appears:

(Print)You selected ADD

Please enter first number:

Please enter second number:

The result is:

Press any key to return to menu…….

Clear the screen and print the menu again.

Submit two cpp files titled:

Q1 <your roll number>.cpp

Q2 <your roll number>.cpp

e.g.

Q1 6969.cpp

Q2 6969.cpp