Problem – 1

1. TITLE OF THE LAB EXPERIMENT

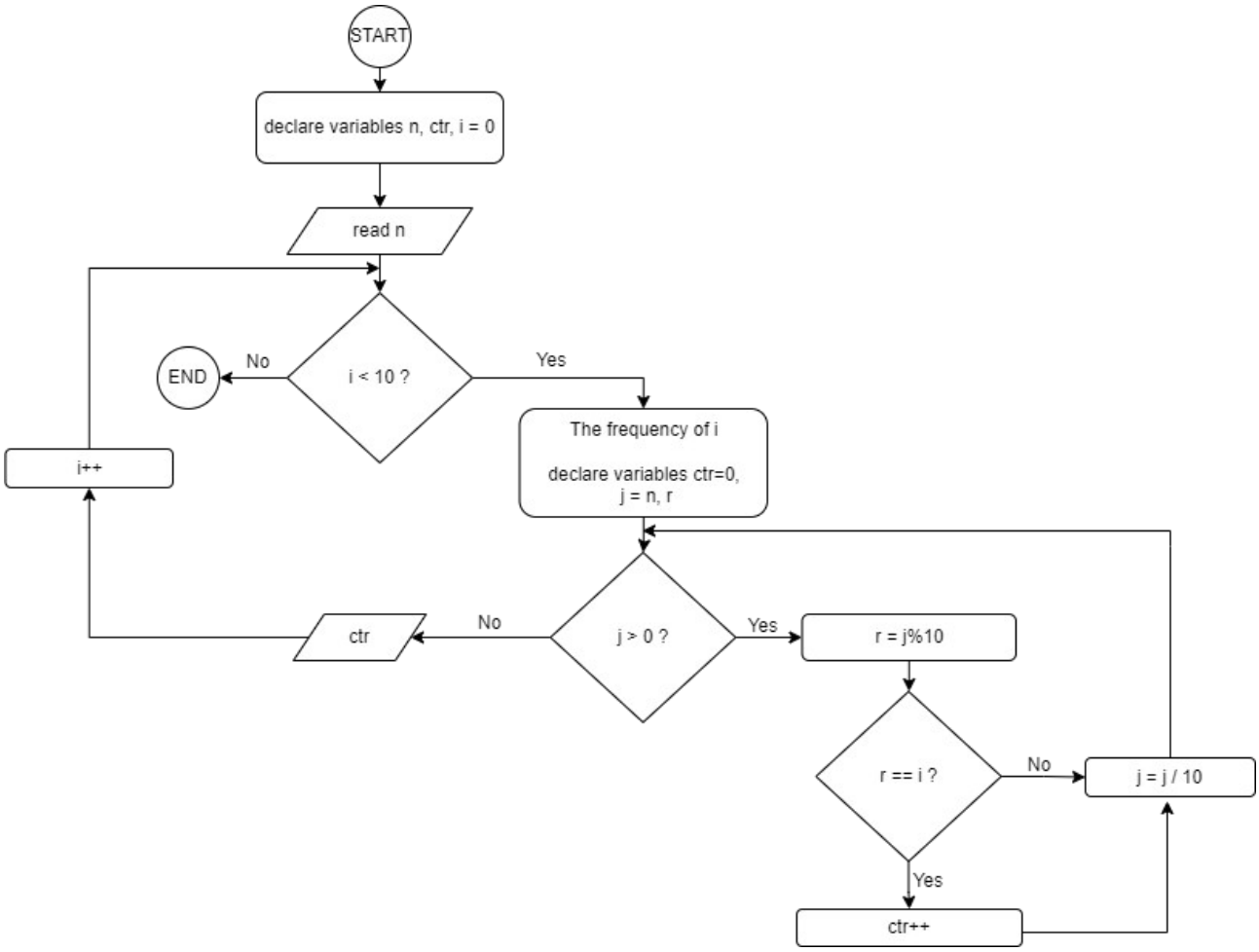
Write a C program to find frequency of each digit in a given integer.

2. OBJECTIVES

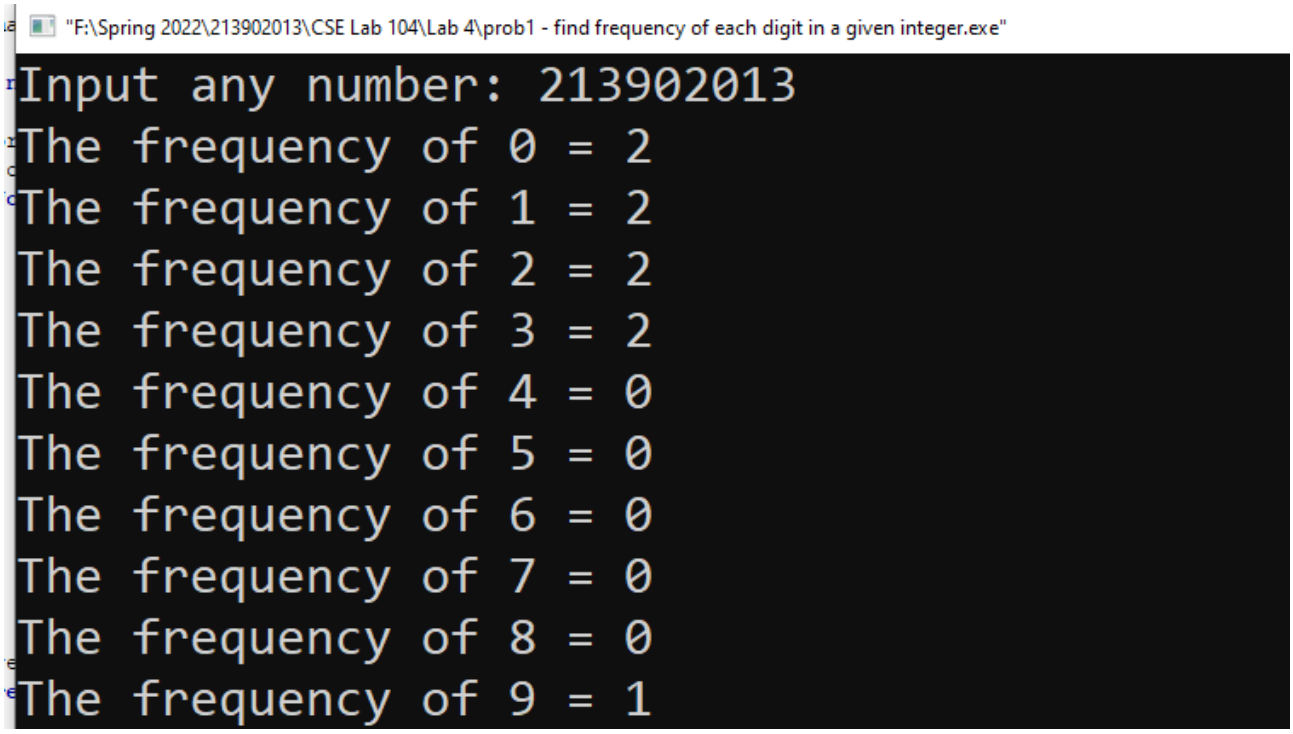
Here we are trying to find the frequency of every digit given by the user.

3. PROCEDURE

Flow chart -



5. TEST RESULT



6. ANALYSIS AND DISCUSSION

- We got the correct output.
- To complete this assignment we did not face any problems.
- We learned some of the basics of the C program from it.
- We have solved the problem.

7. SUMMARY:

We have completed the program by using C.

Problem – 2

1. TITLE OF THE LAB EXPERIMENT

Write a C program to find sum of first and last digit of any number.

2. OBJECTIVES

Here we are trying to find out the sum of the first and last number given by the user.

3. PROCEDURE

Pseudo code-

Step 1- Start.

Step 2- Declare variable n, sum = 0 and then send message Enter any number.

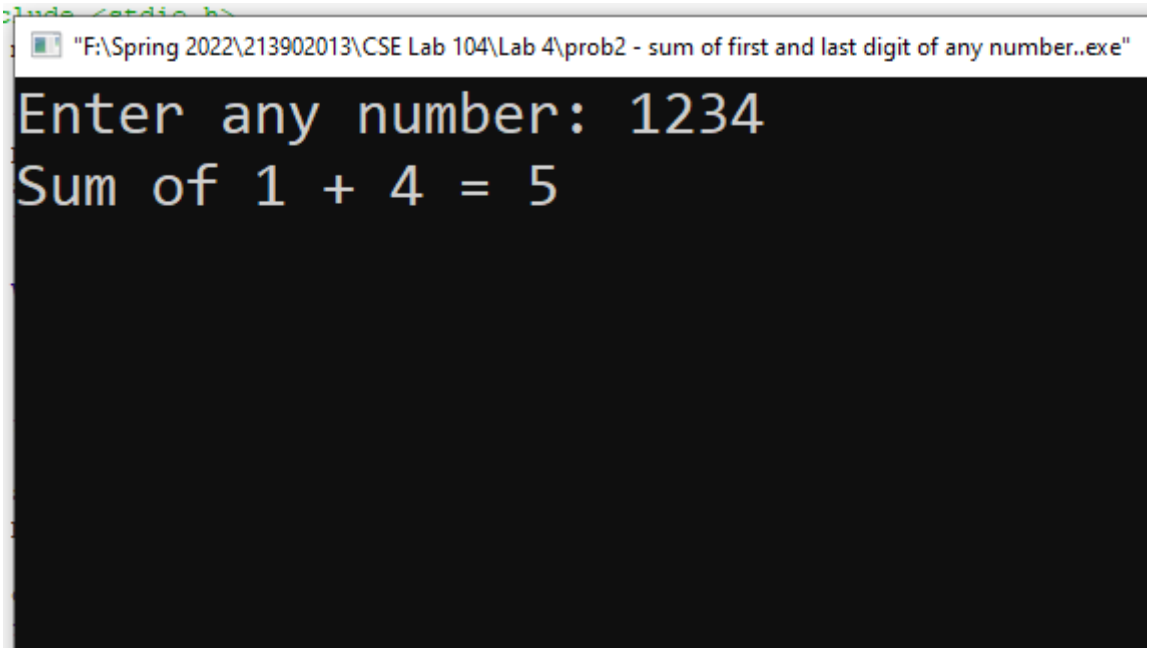
Step 3- Read n and declare variable n2 for last digit of a number and n2 = n%10

Step 4- Declare n1 for first digit of a number and to find the number we using while loop to divide the given number by 10 until the number is greater than 10. In the end, we get the first digit.

Step 5- In the last, calculate the sum of n1 and n2.

Step 6- End.

5. TEST RESULT



6. ANALYSIS AND DISCUSSION

- We got the correct output.
- To complete this assignment we did not face any problems.
- We learned some of the basics of the C program from it.
- We have solved the problem.

7. SUMMARY:

We have completed the program by using C.

Problem – 3

1. TITLE OF THE LAB EXPERIMENT

Write a C program to swap first and last digits of any number.

2. OBJECTIVES

Here we are trying to exchange the first and last number given by the user.

3. PROCEDURE

Pseudo code-

Step 1- Start.

Step 2- Declare variable n, n1 = 0, n2, rem, r = 0 and then send message Enter any number.

Step 3- Read n and declare variable temp = n.

Step 4- Now using while loop and number gets reversed and stored in *temp.*

Step 5- Now check is n1 = 2? If n1 is 2 then temp = n and then use loop until temp > 0 and calculate rem = temp%10, r = (r*10) + rem, temp = temp/10

Step 6- After completing while loop then print r. If n1 is not 2 and temp = n then rem = temp%10 and calculate r = (r*10) + rem; and temp = temp/10.

Step 7- Now declare r1 which is equal to r and r = 0, temp = n and n2 = n1

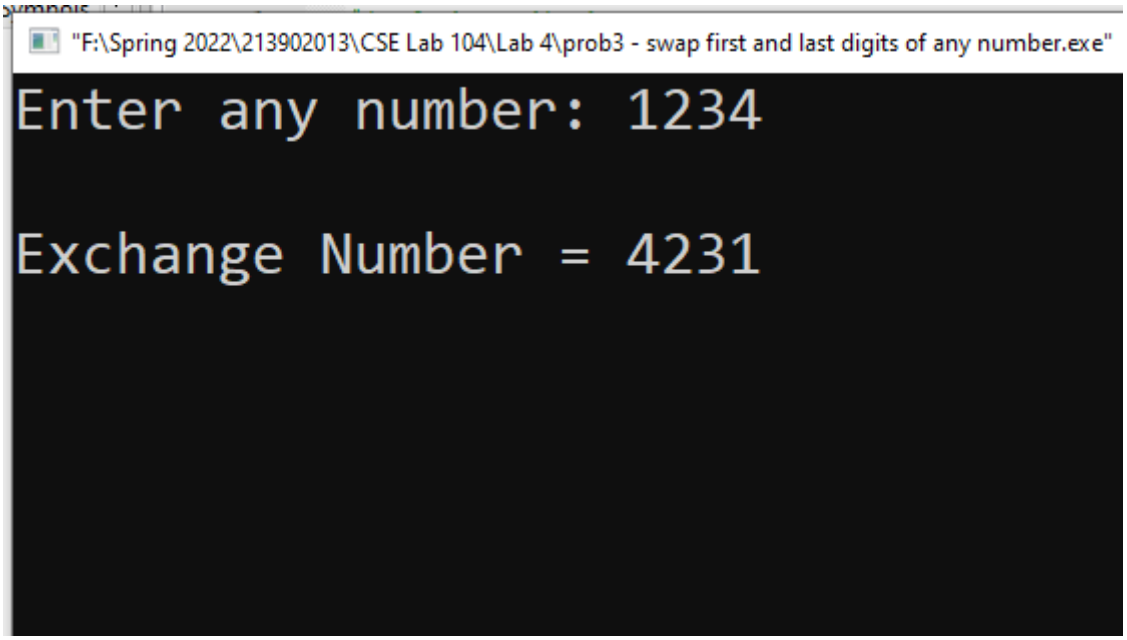
Step 8- Now using loop and declare n3 = r1%10 and check is n2 equal n1? If n1 = n2 then rem = temp%10 and calculate r = (r*10) + rem. If n1 is not equal n2 then r = (r*10) + n3

Step 9- Now calculate temp = temp/10, r1 = r1/10 and n2 is decreasing.

Step 10- Now print r which was exchange number.

Step 11- End the program.

5. TEST RESULT



ANALYSIS AND DISCUSSION

- We got the correct output.
- To complete this assignment we did not face any problems.
- We learned some of the basics of the C program from it.
- We have solved the problem.

7. SUMMARY:

We have completed the program by using C.

Problem – 4

1. TITLE OF THE LAB EXPERIMENT

Write a C program to calculate product of digits of any number.

2. OBJECTIVES

Here we are trying to calculate the product of number given by the user.

3. PROCEDURE

Pseudo code-

Step 1- Start.

Step 2- Declare n, mul = 1.

Step 3- Ask the user to enter a number and read n.

Step 4- Get the last digit of the given number by performing the modulo division (%) and store the value in rem = number % 10.

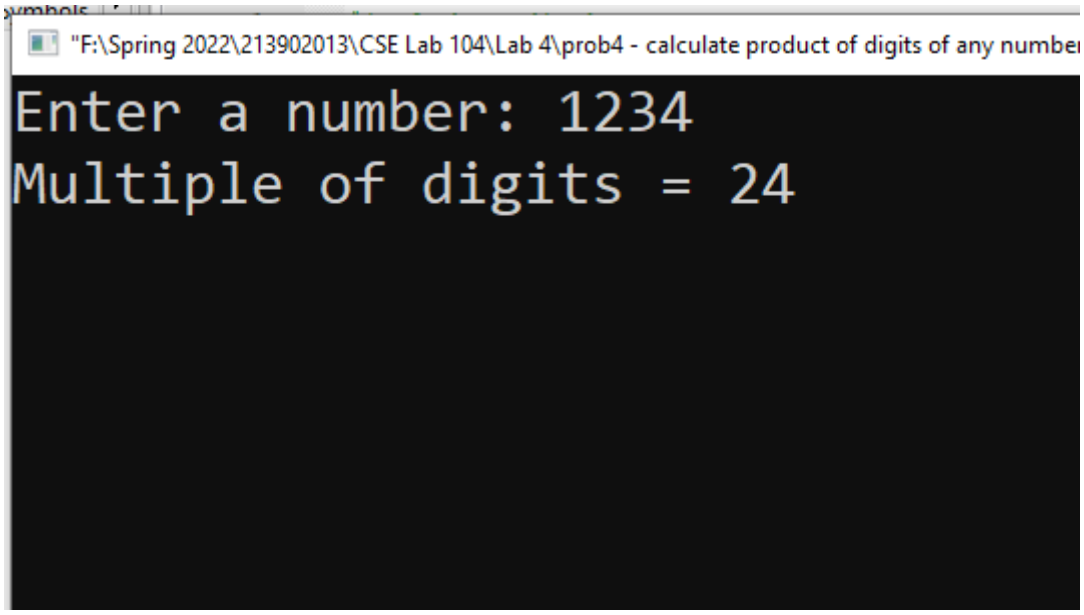
Step 5- Multiply the last digit (rem) found above with mul i.e. mul= mul* rem.

Step 6- Remove last digit by dividing the number by 10 i.e. n = n / 10.

Step 7- Repeat steps 3-5 until the number becomes 0. In the last, we got the product of the digits of the input number.

Step 8- End.

5. TEST RESULT



6. ANALYSIS AND DISCUSSION

- We got the correct output.
- To complete this assignment we did not face any problems.
- We learned some of the basics of the C program from it.
- We have solved the problem.

7. SUMMARY:

We have completed the program by using C.

Problem – 5

1. TITLE OF THE LAB EXPERIMENT

Write a program in C to find the sum of the series 1 +11 + 111 + 1111 + . n terms.

2. OBJECTIVES

Here we are trying to find out the sum of the series given by the user.

3. PROCEDURE

Pseudo code-

Step 1- Start.

Step 2- Declare variable n and sum = 0.

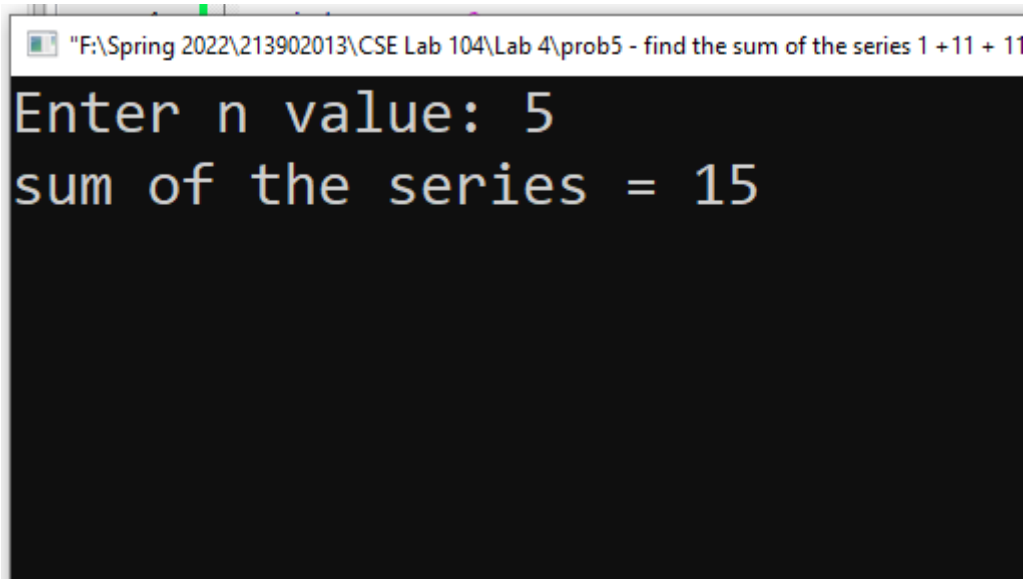
Step 3- Read n and using loop to collect value for sum.

Step 4- Calculate sum = sum +i (i is collecting from loop)

Step 5- Print sum.

Step 6- End

5. TEST RESULT



6. ANALYSIS AND DISCUSSION

- We got the correct output.
- To complete this assignment we did not face any problems.
- We learned some of the basics of the C program from it.
- We have solved the problem.

7. SUMMARY:

We have completed the program by using C.