

## Q.1 Controlling System for shopping.

Algorithm :-

Step 1. Start

Step 2. If she is employee then goto  
Step 3 else goto step 4.

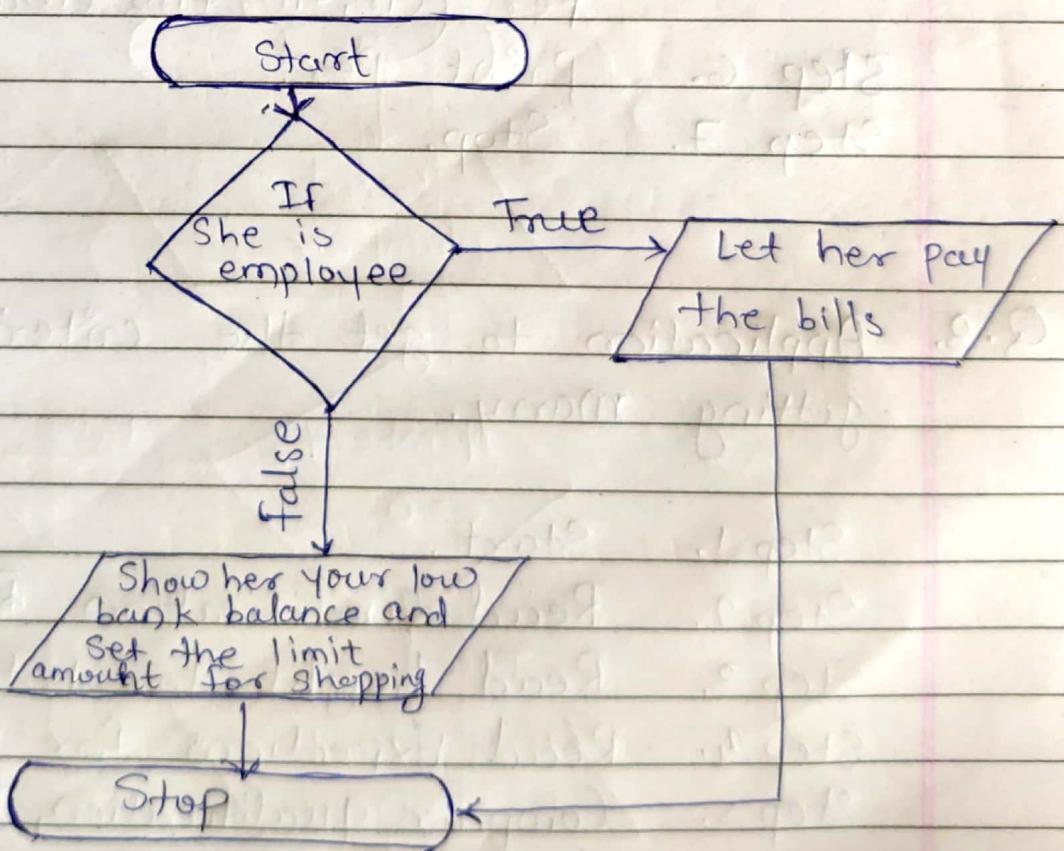
Step 3. Let her pay the bills.

Step 4. Show her your low bank balance

Step 5. and set the limit amount for  
shopping.

Step 5. Stop.

Flow Chart :-



Q.2 Student Marksheets

Input : 5 subjects (out of 100)

Calculate Average :-

Calculate Percentage :-

Algorithm :-

Step 1. Start

Step 2. Read 5 subjects Marks out of 100.

Step 3. Calculate average.

$$\text{Avg} = (m_1 + m_2 + m_3 + m_4 + m_5) / 5.$$

Step 4. Print Avg

Step 5. Calculate Percentage.

$$\text{Per} = ((m_1 + m_2 + m_3 + m_4 + m_5) / 500) \times 100$$

Step 6. Print Per.

Step 7. Stop.

Q.3. Application to get the criteria for getting marry.

Step 1. Start.

Step 2. Read qualification, Age for both

Step 3. Read height for both

Step 4. Read Expectations for both.

Step 5. Compare qualification, height, Expectations of both. If all matches then goto Step 6 else go to Step 7.

Step 6. Print "Matched".

Step 7. print "Not matched".

Step 8. Stop.

# Assignment - 1

1. Check if the given number is Even or Odd.

→ Algorithm :-

Step 1 :- Start.

Step 2 :- Read number.

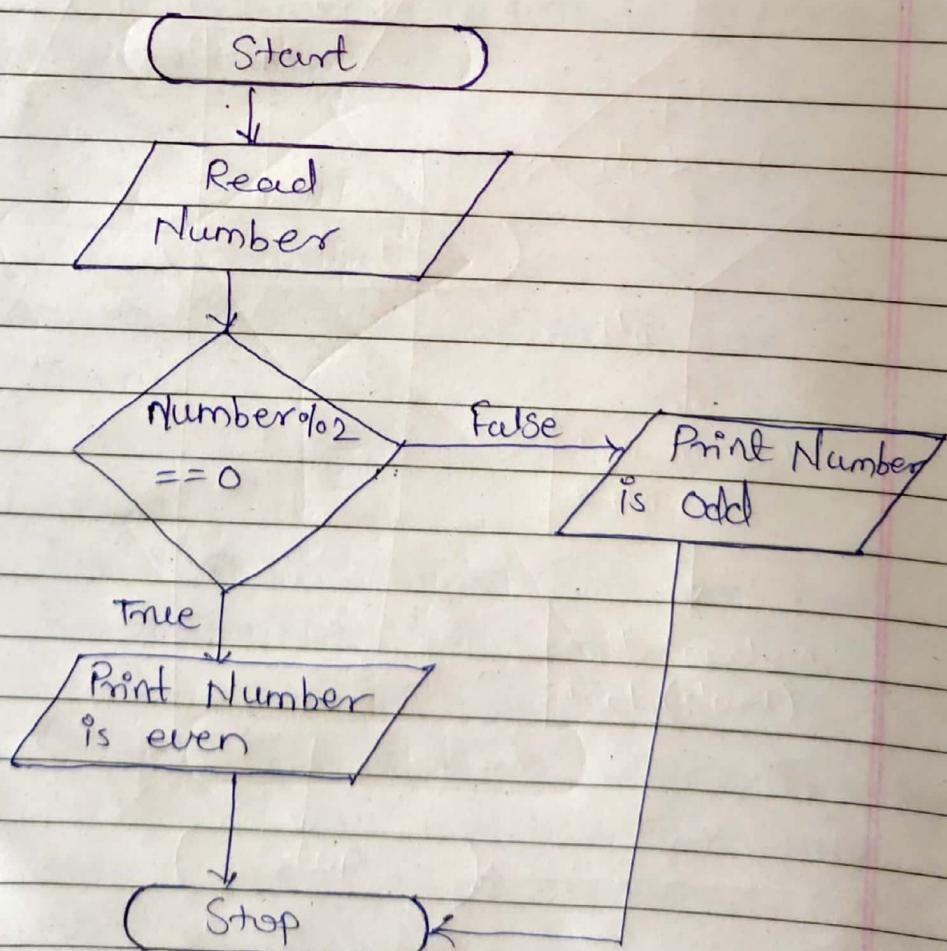
Step 3 :- If number  $\% 2 == 0$   
                  goto Step 4  
         else goto Step

Step 4 :- Print Number is even.

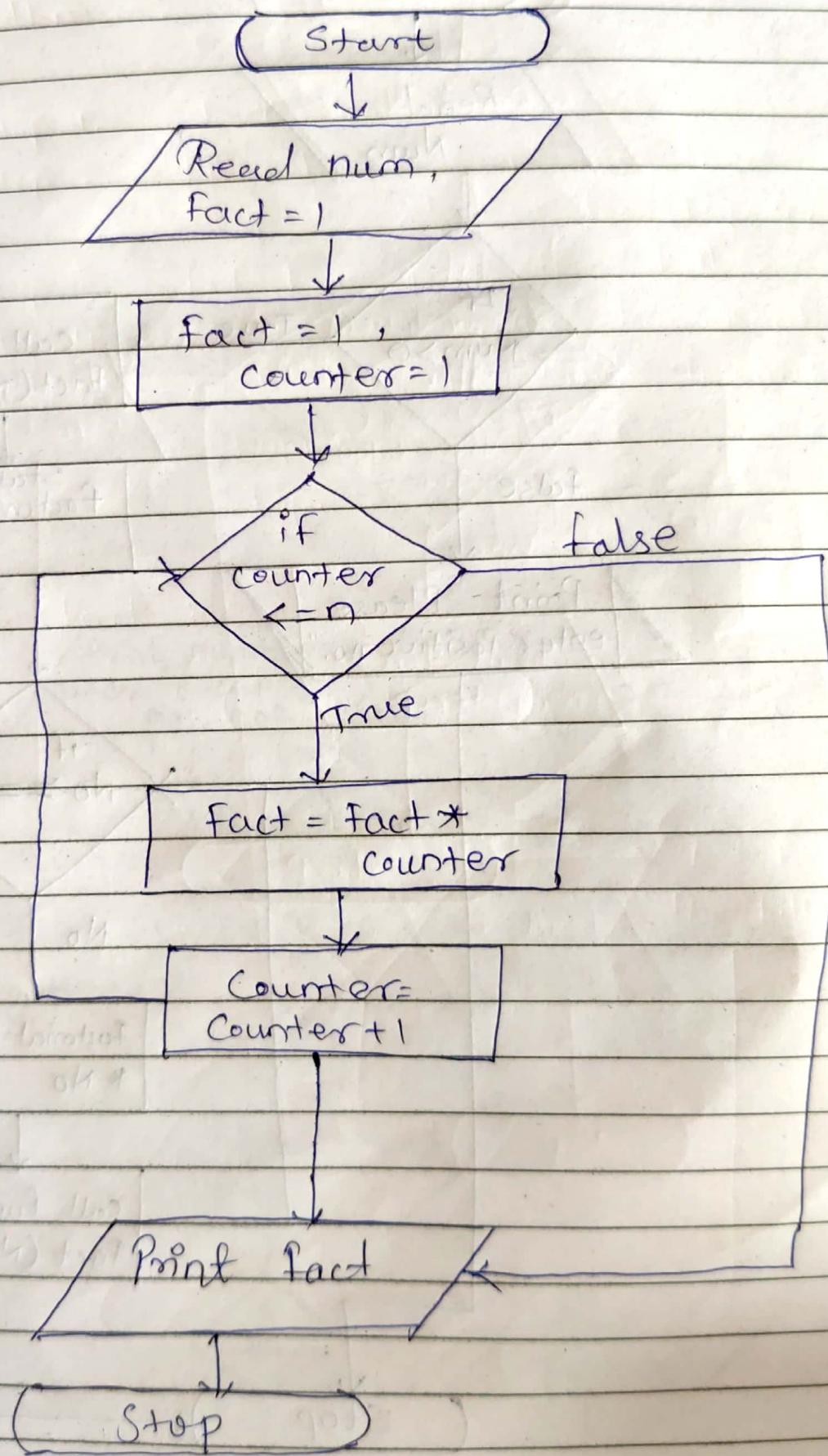
Step 5 :- Print Number is odd.

Step 6 :- Stop.

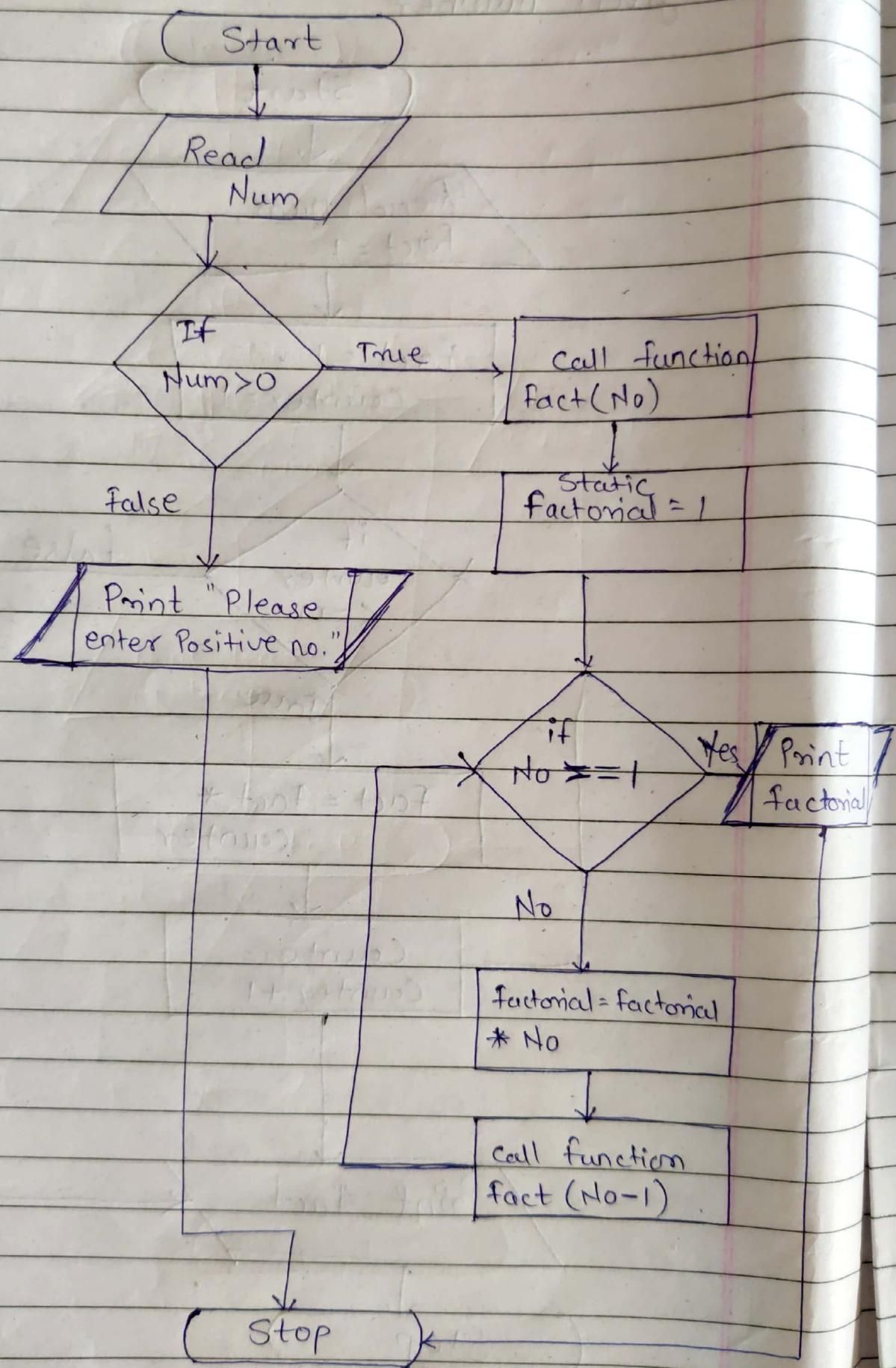
flow chart :-



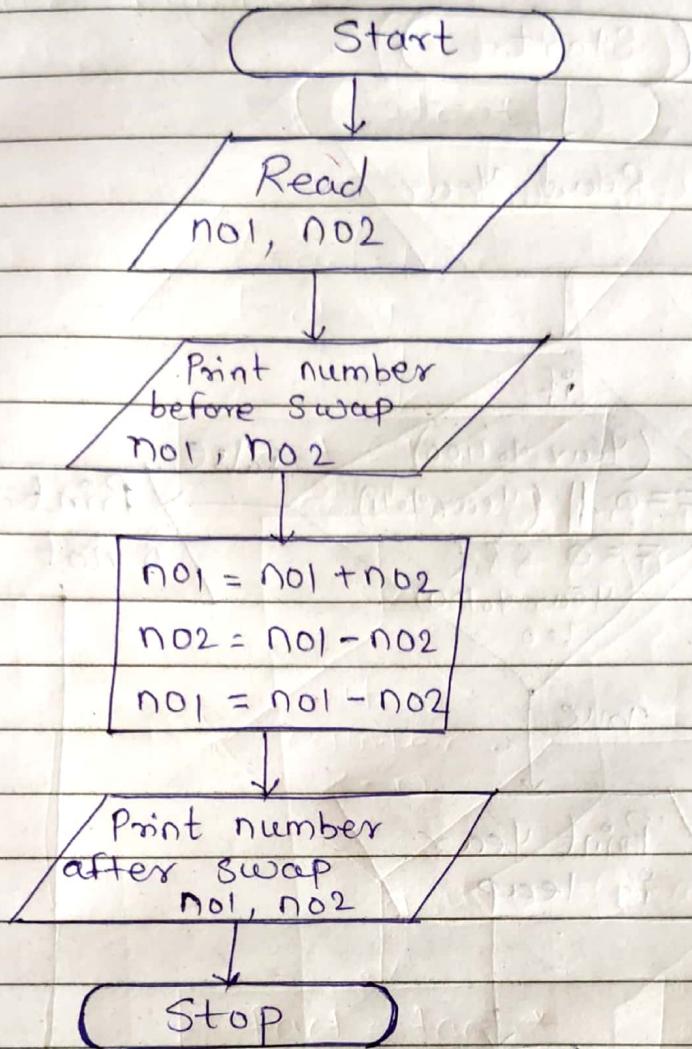
2. write a java program to find the factorial of a given number.



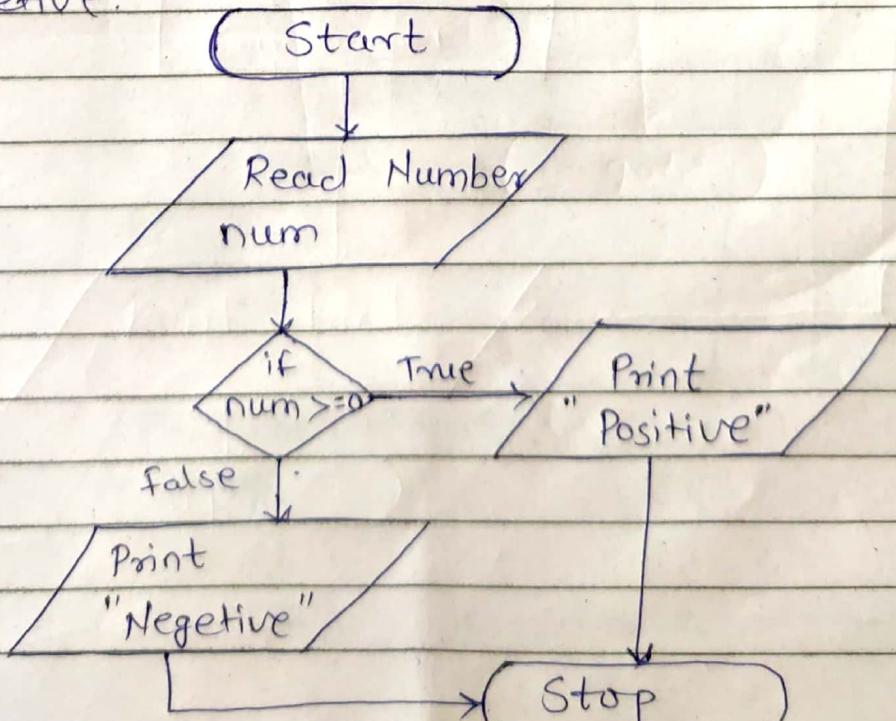
3. Find the factorial of a number using Recursion.



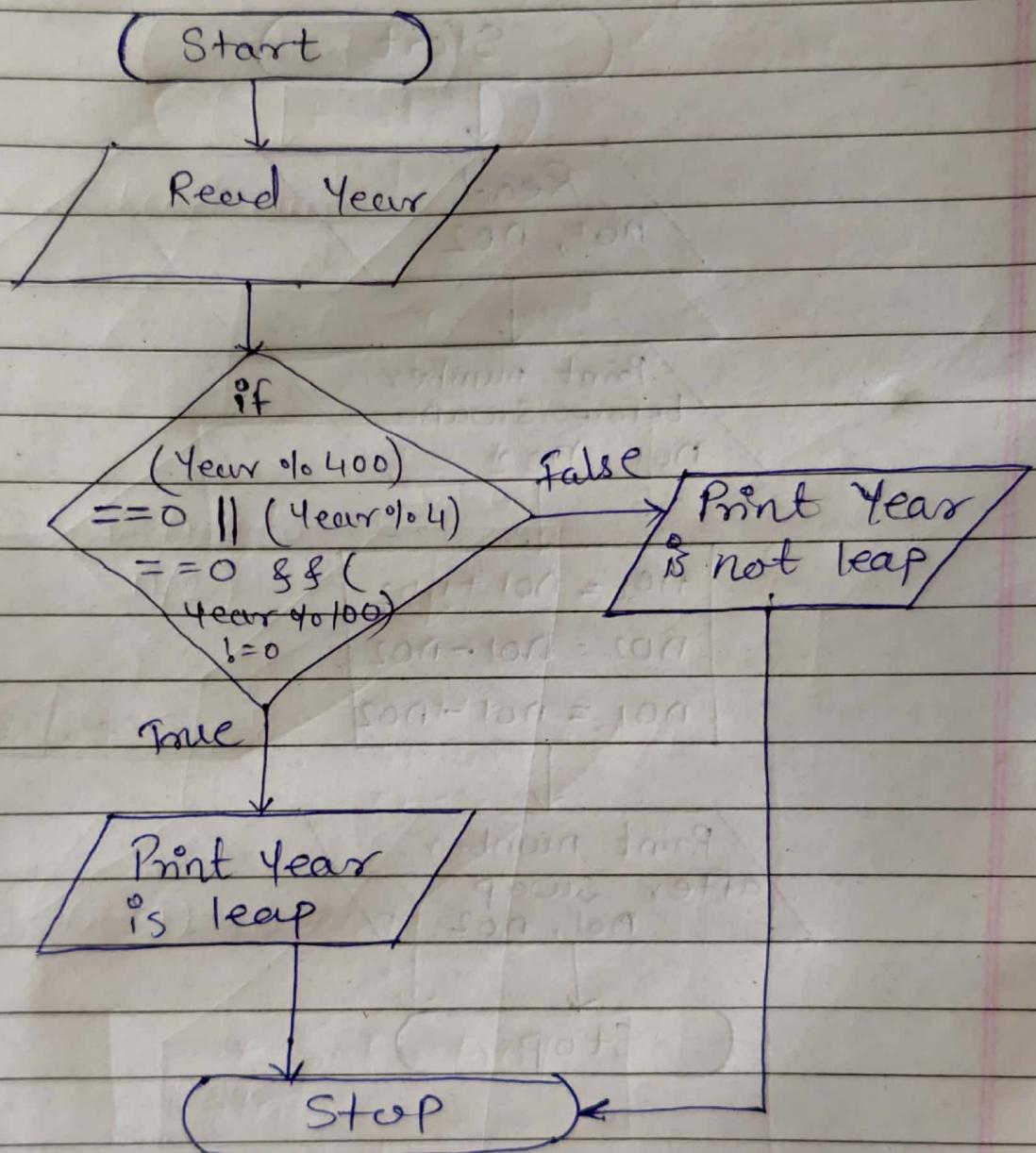
4. Swap two numbers without using the third variable approach.



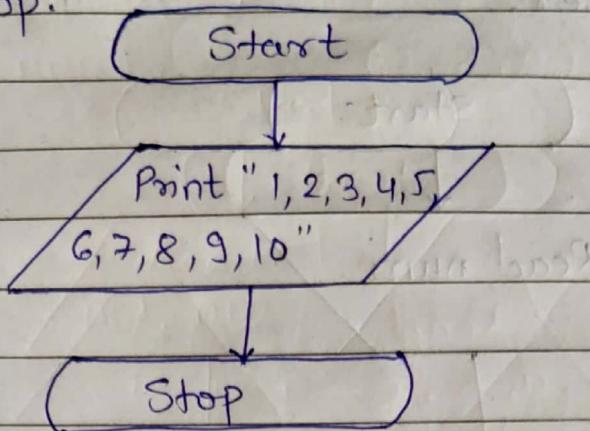
5. How to check whether the given number is Positive or negative.



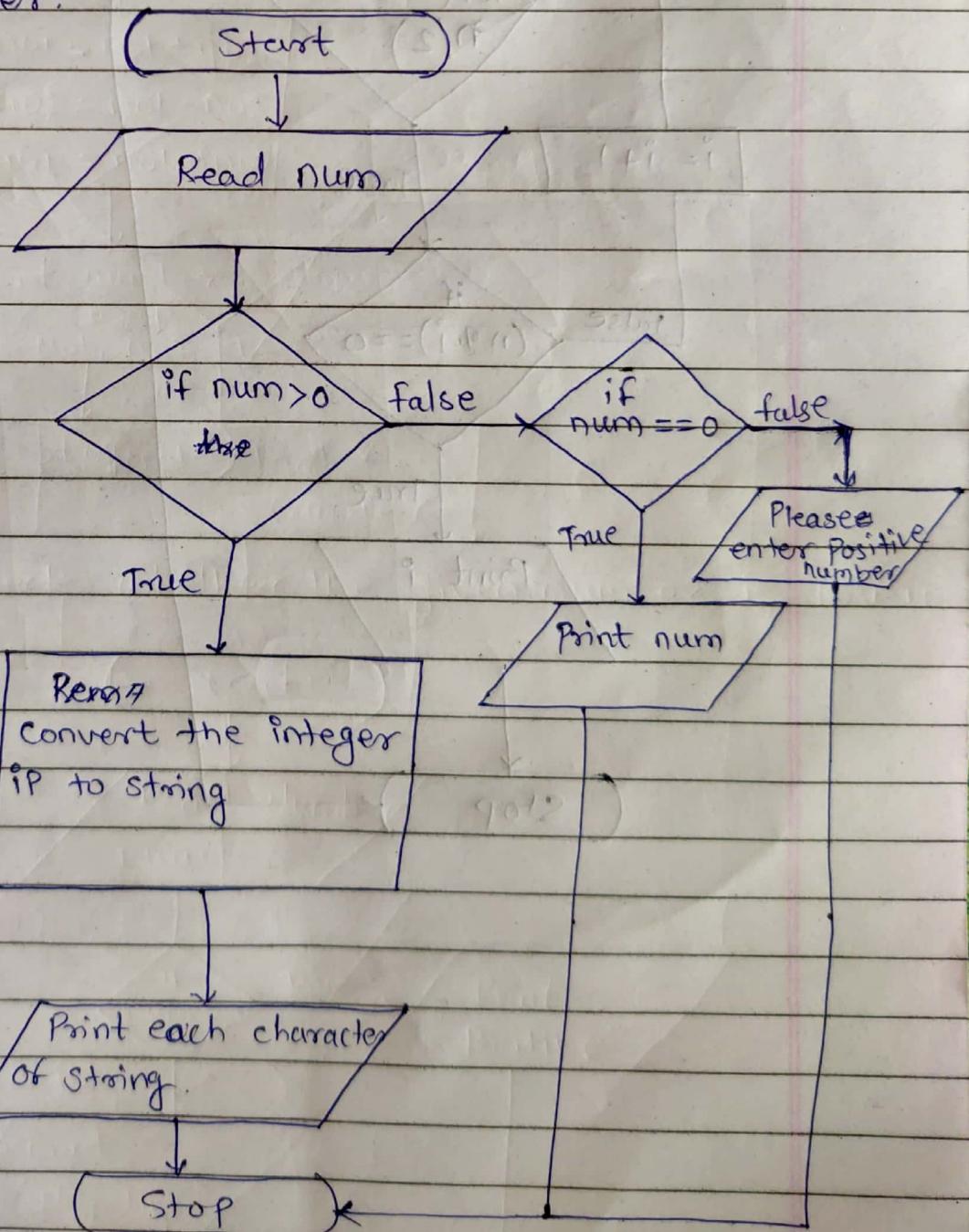
6. write a java program to find whether a given number is Leap year or Not.



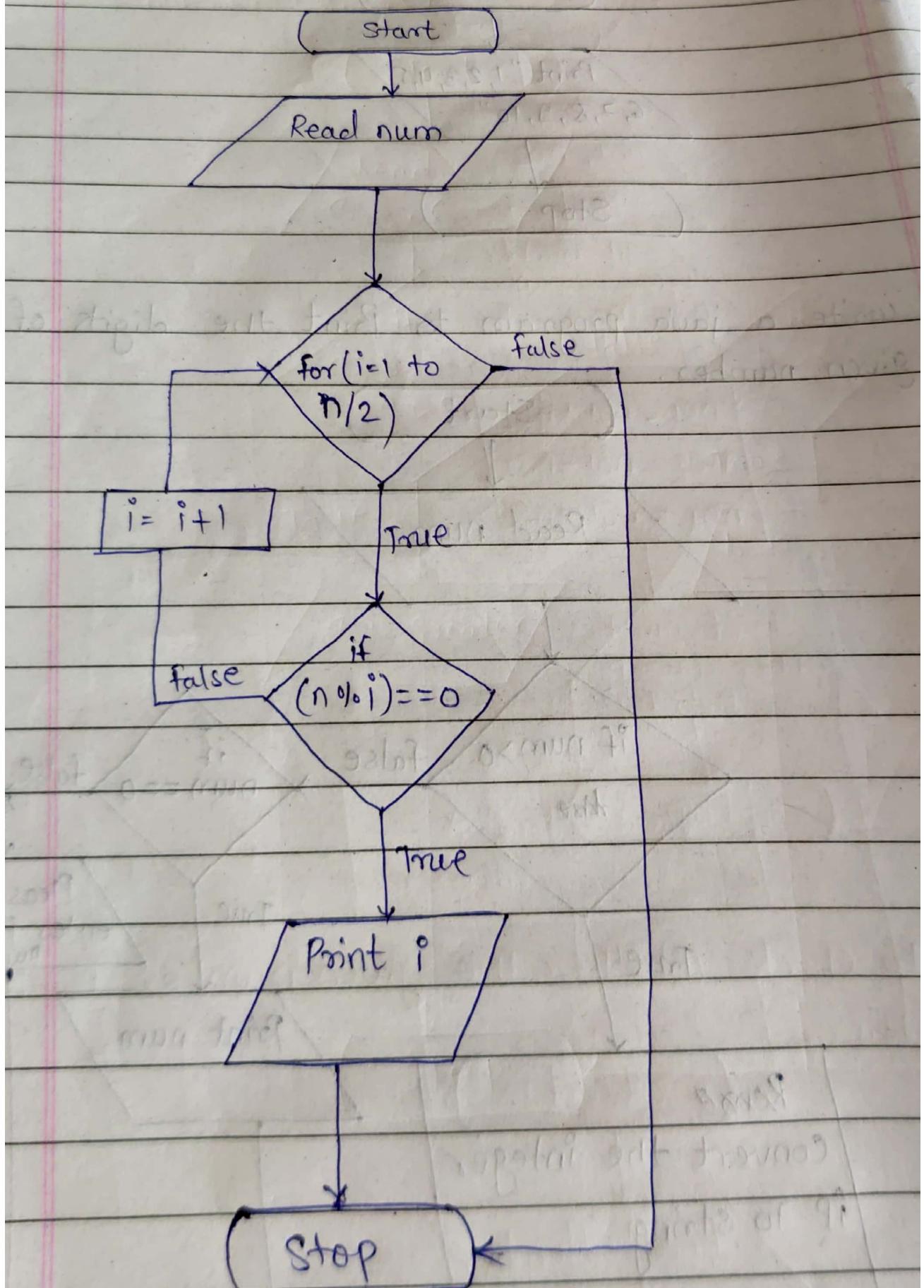
7. write a java program to Print 1 to 10 without using loop.



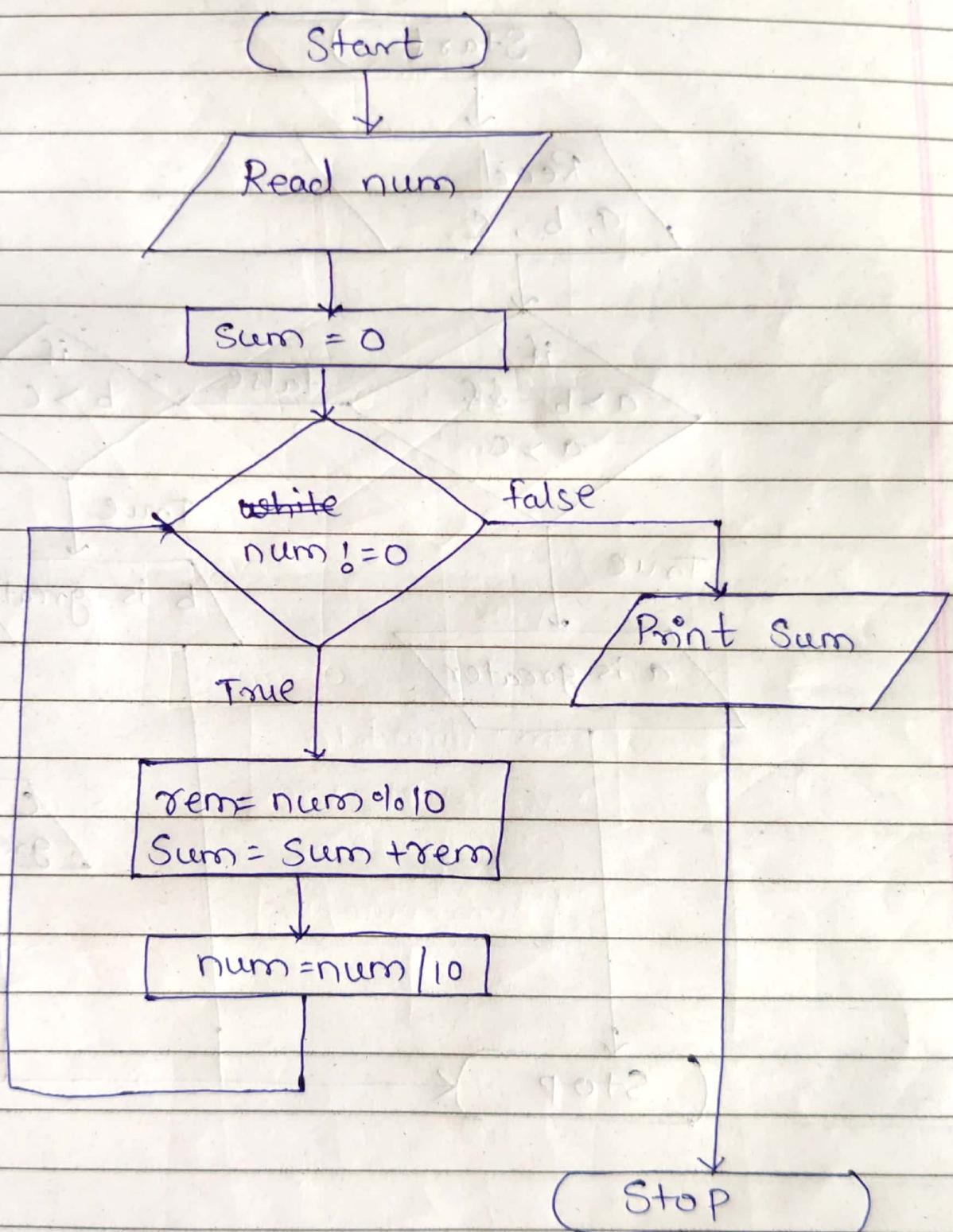
8. write a java program to Print the digits of a given number.



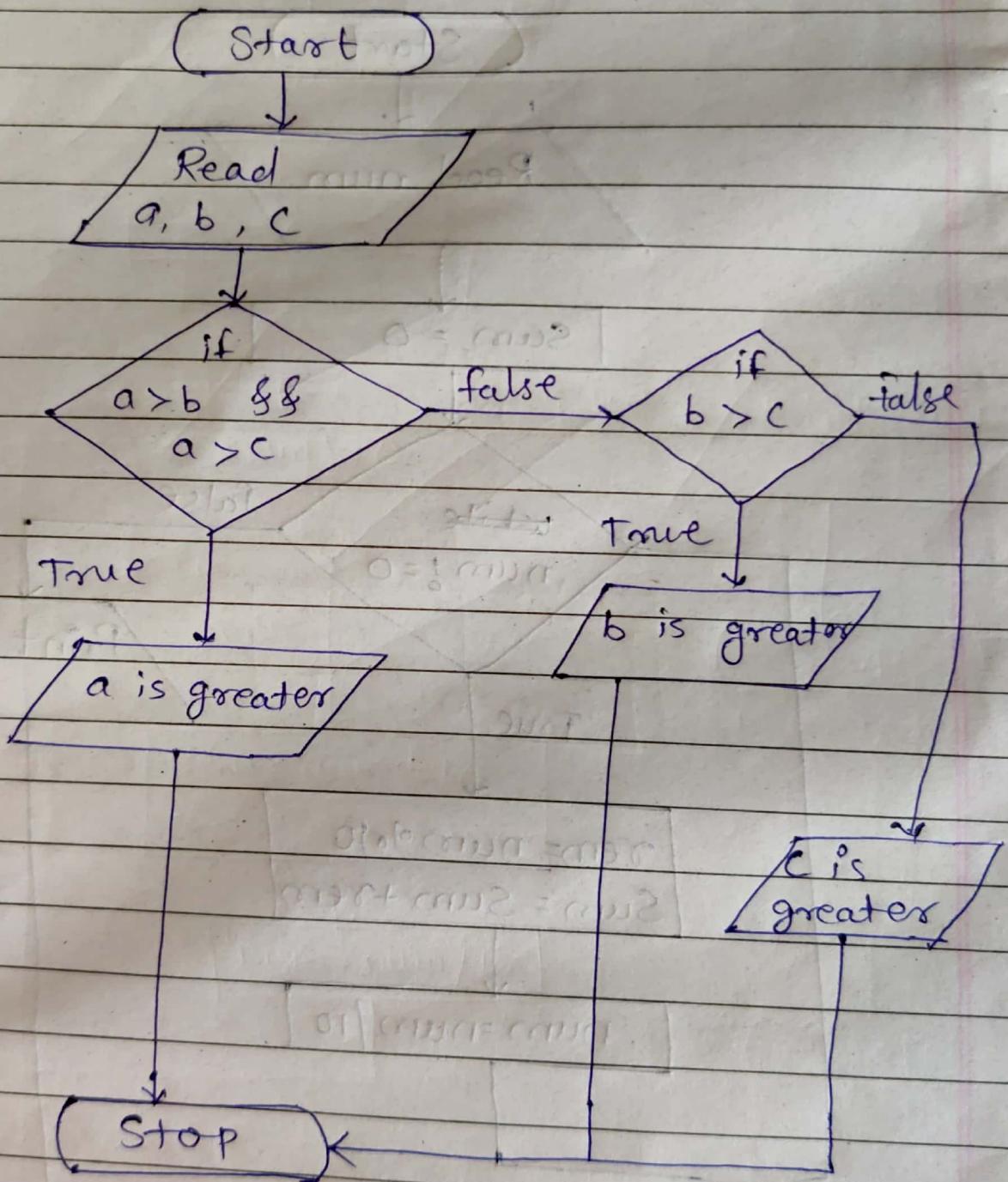
8. write a program to print all the factors of the Given number.



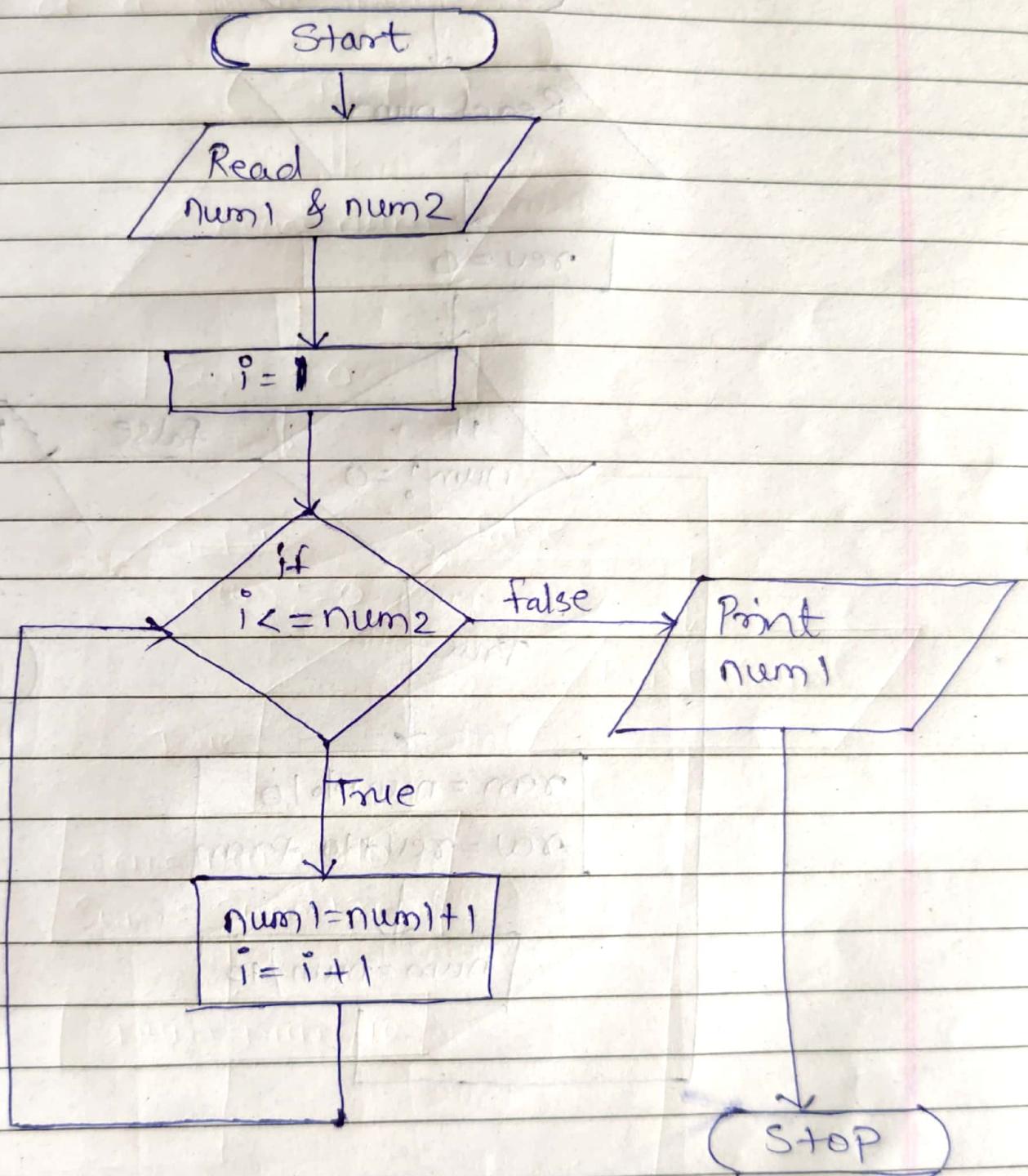
10. Write a java program to find the sum of the digits of a given number.



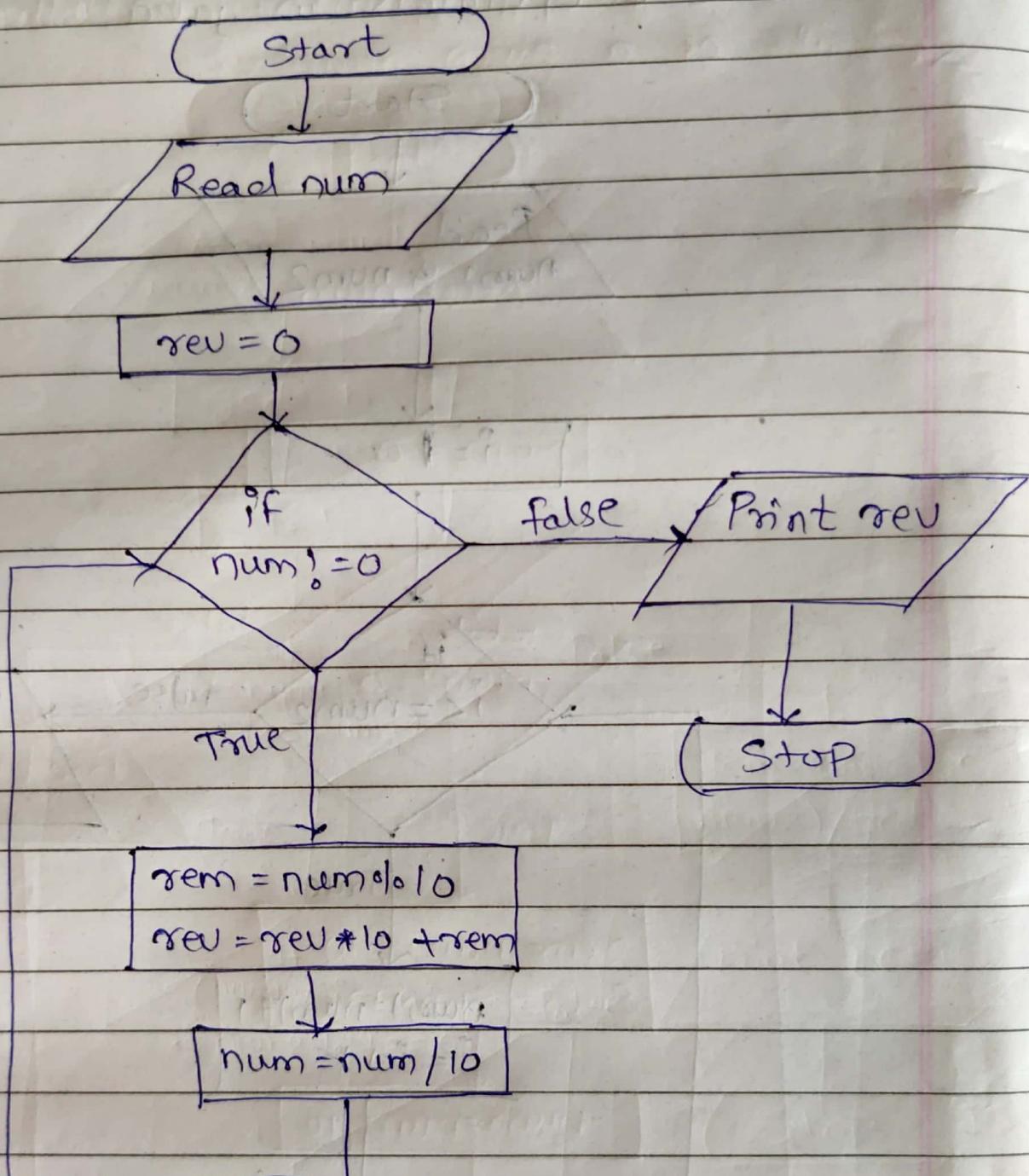
11. write a java program to find the smallest of 3 numbers (a, b, c)



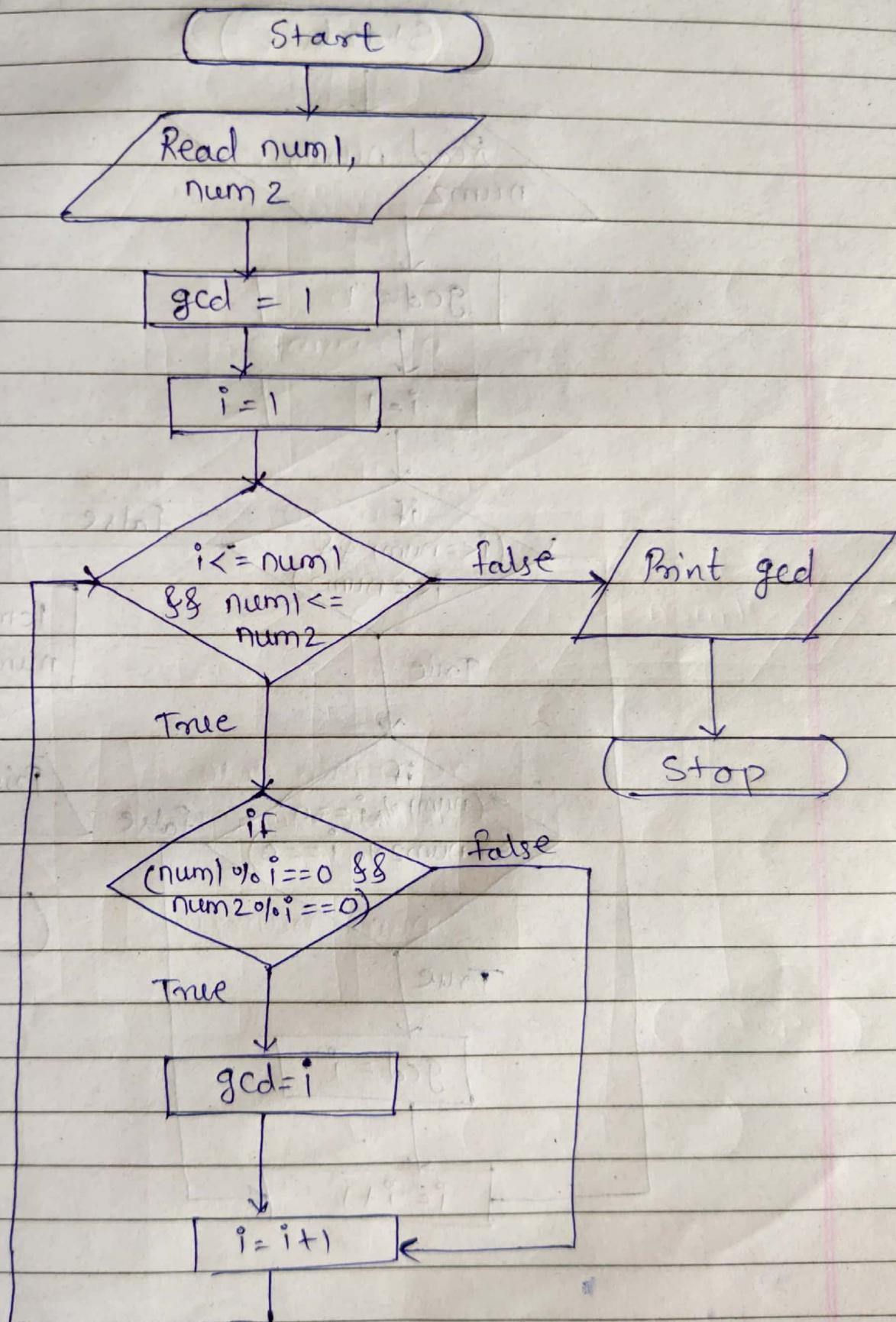
12. How to add two numbers without using arithmetic operators in java



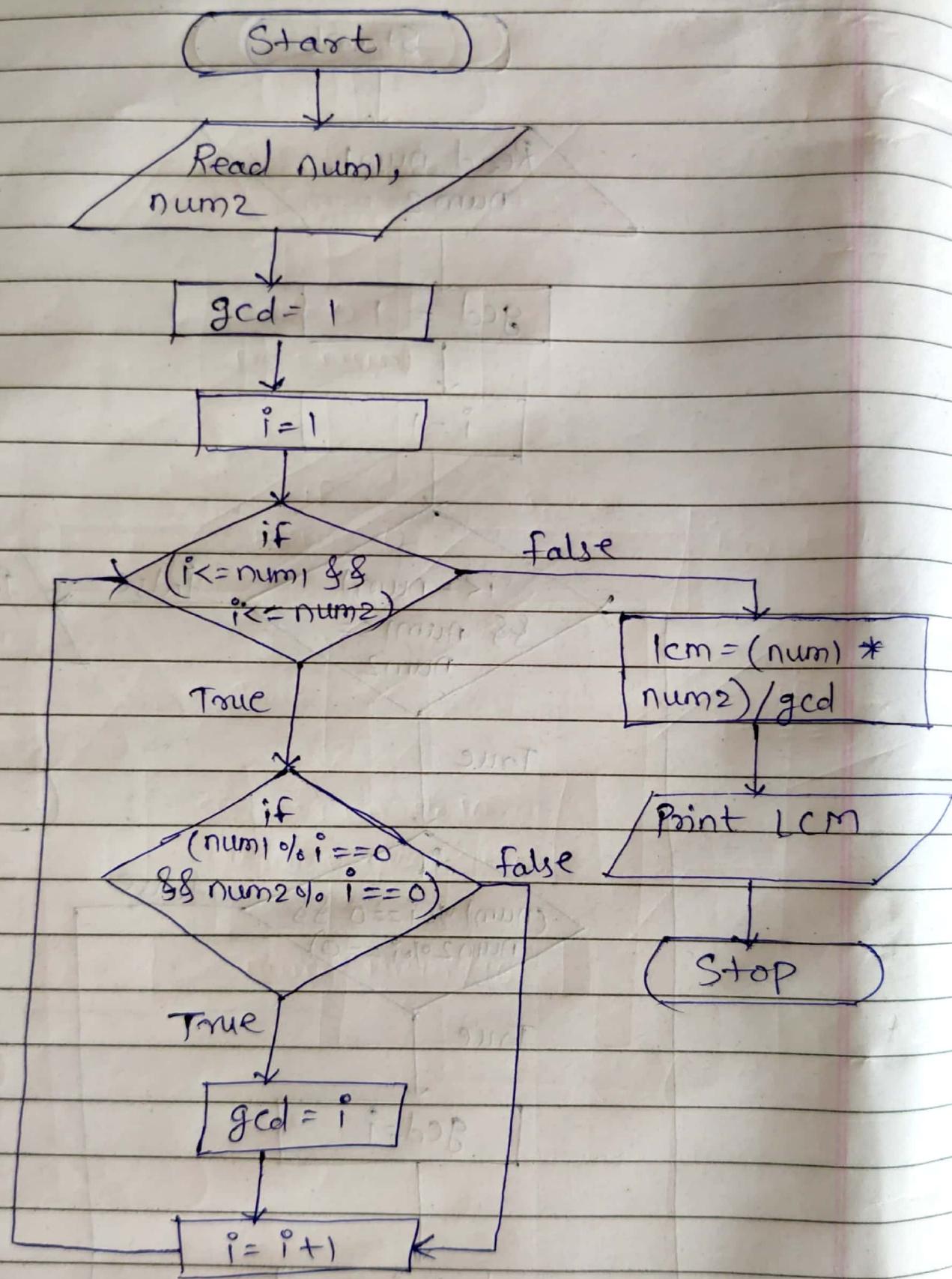
13. write a java program to reverse a given number



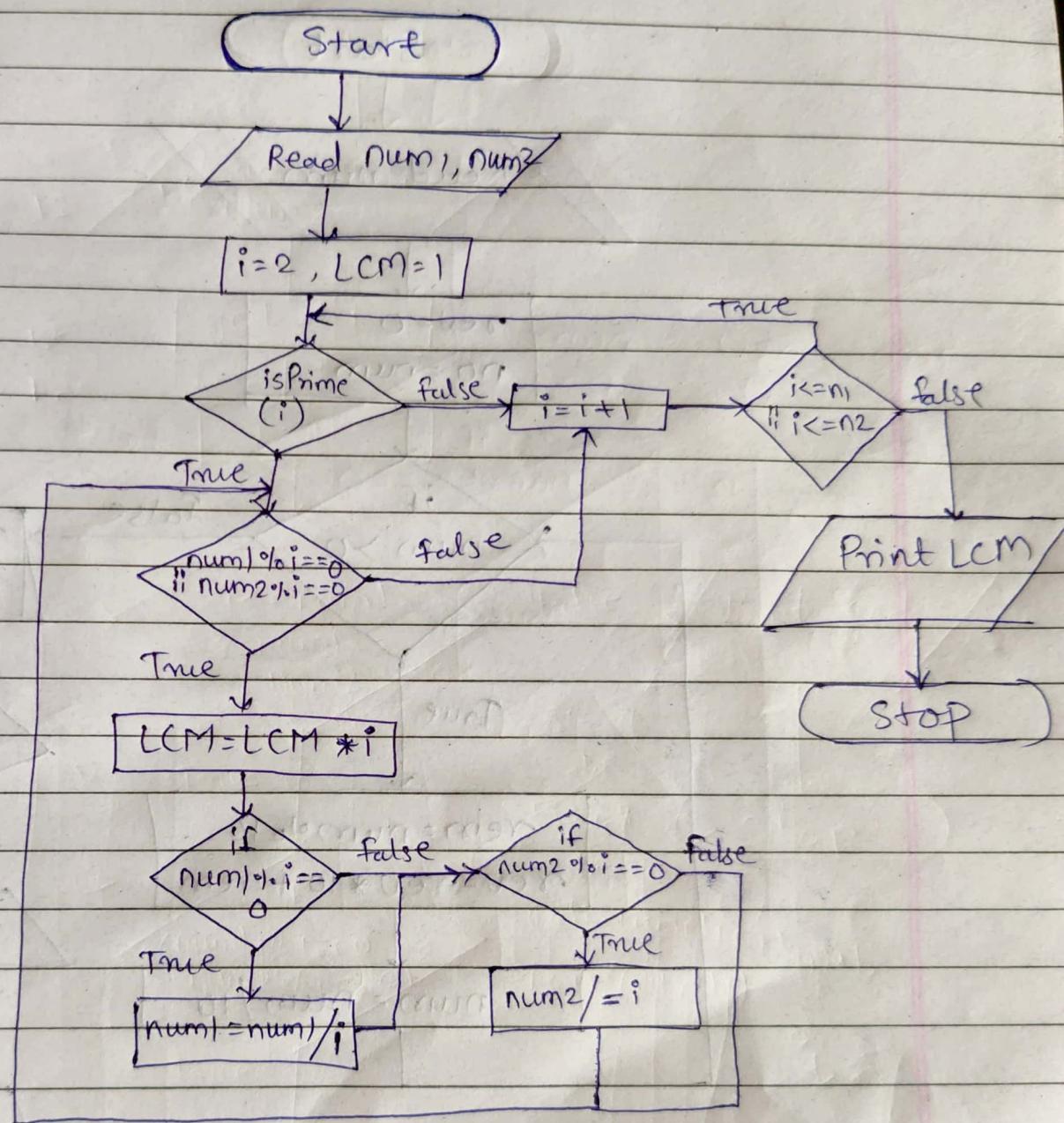
14. write a java program to find the GCD of two given numbers.



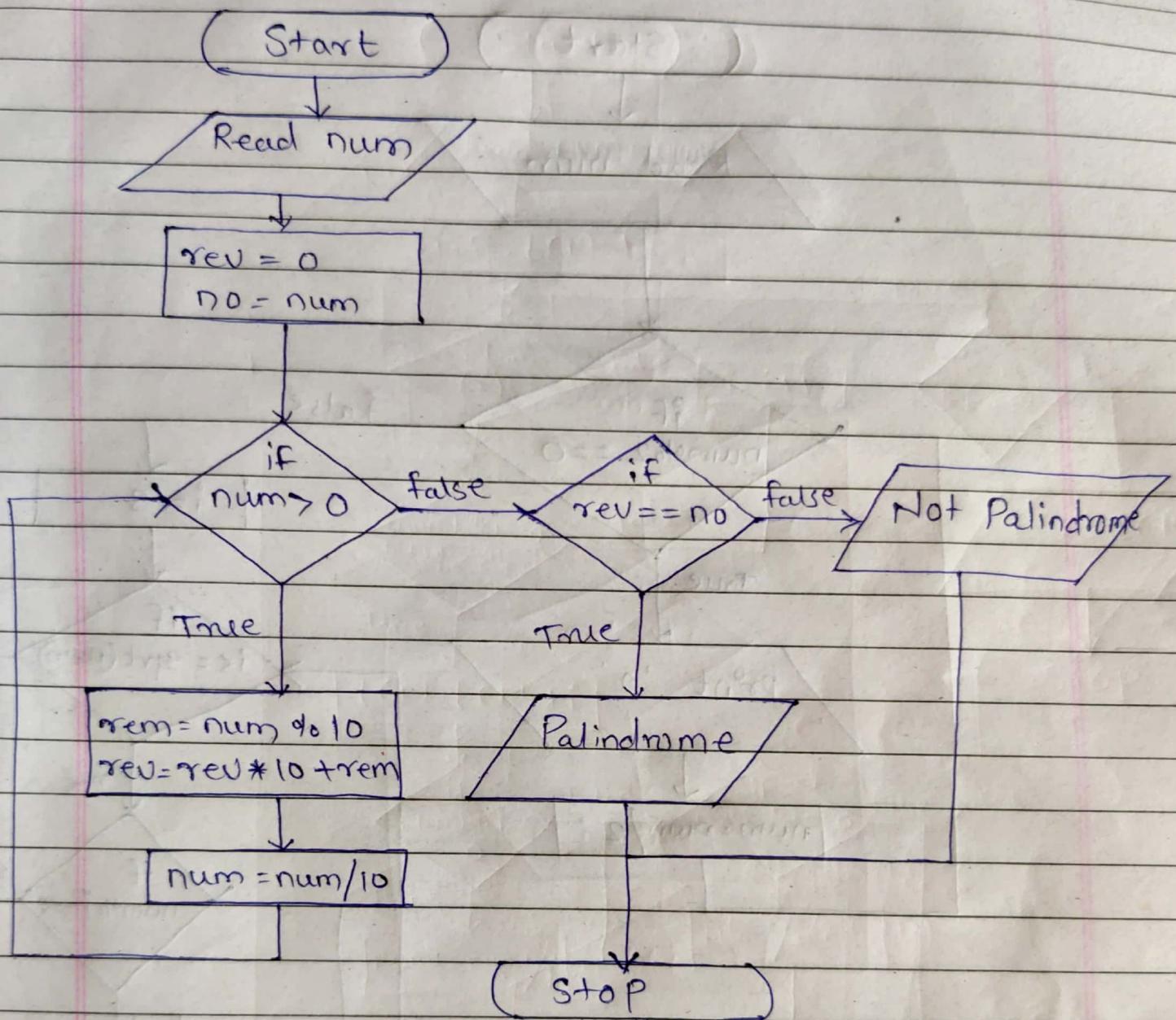
15. Write a java program to find LCM of two given numbers.



16. write a java program to find LCM of two given numbers using the Prime factors method.

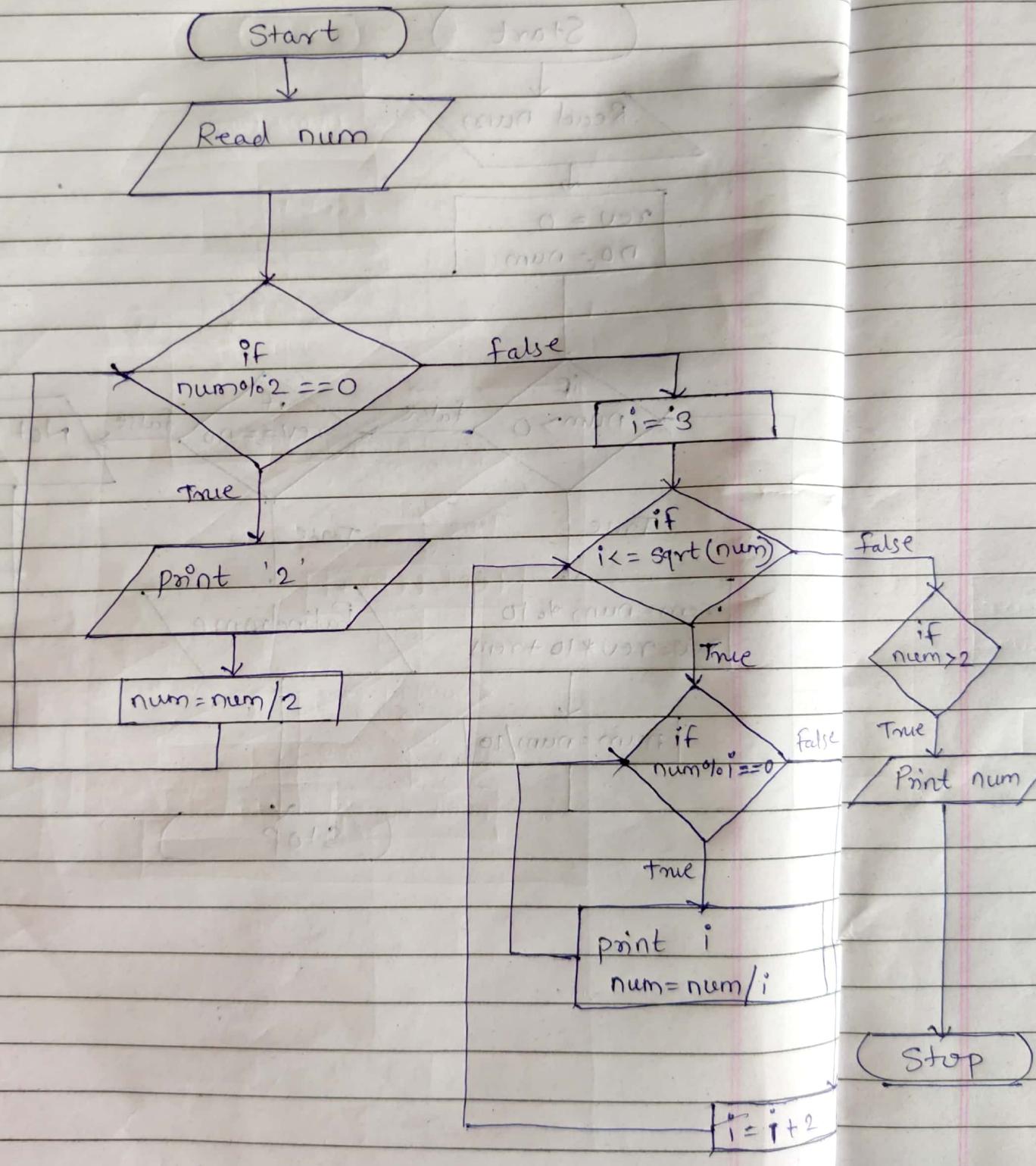


17. Check whether the given number is a palindrome or not.

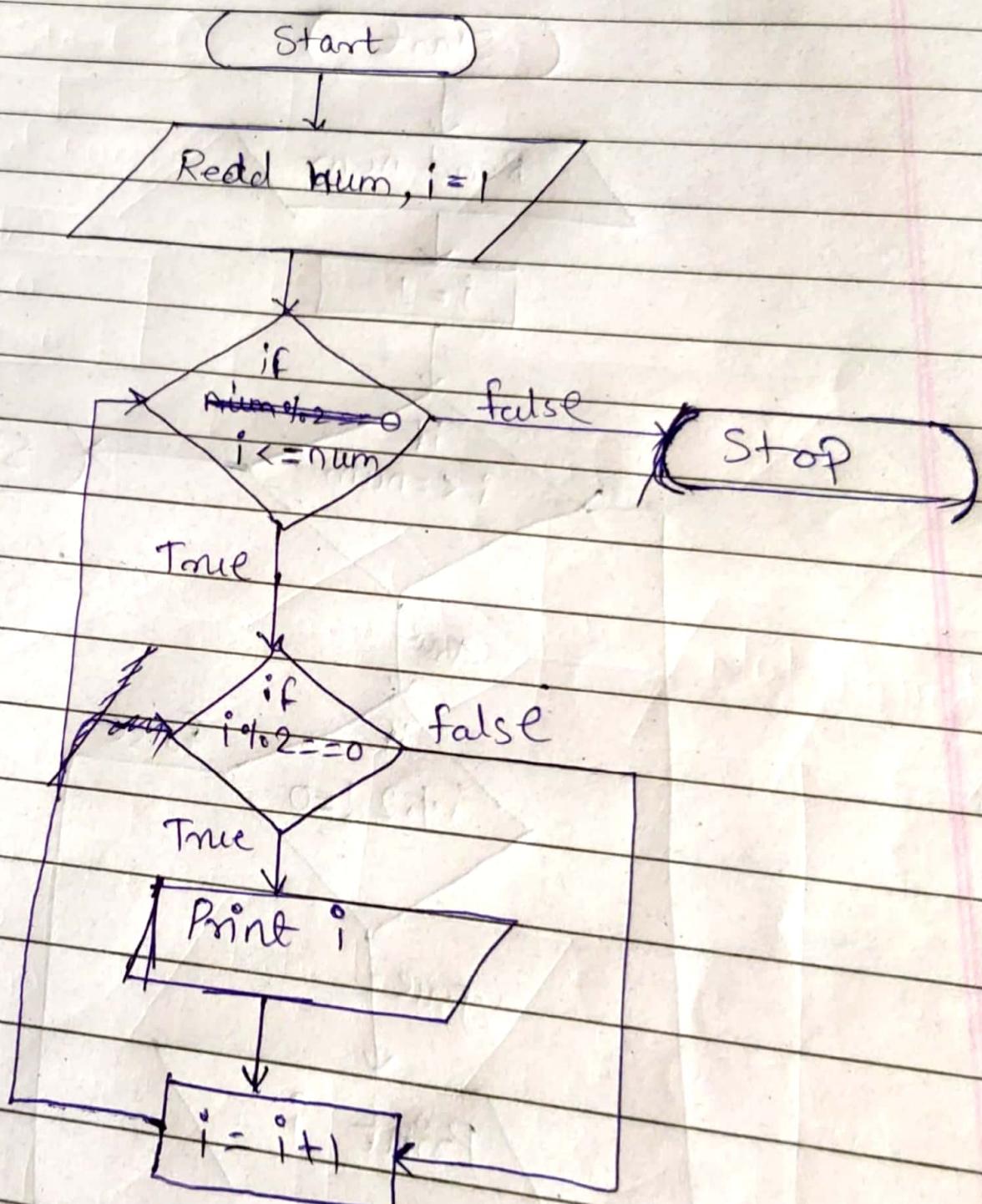


18. Write a java program to print all the prime factors of the Given number.

19. To  
2



19. To print the following series Even number series  
2 4 6 8 10 12 14 16 ...



20. To print the following series ODD number series

1 3 5 7 9 11 13 ...

