Assignment 1.

1. Check if the number is even or odd

step1: start
step2: Enter the value
step3: If the number is divisible by 2 then even else go to step 4
step4: Number is odd
step5: Print the output
step6: End.

2. Write a Java program to find factorial of a given number.

Step1: Start
Step2: Input the value from used as num
step3: Declare and initialize fact=1 and i=1
step 4: Check and repeat loop until i<=num
step5: fact = fact * i
step6: Increment i
step7: Print fact
step8: Stop.

3. find factorial of number using Recursion.

Step1: Start
Step2: Read the input value n a
Step3: Check if n=0 using loop
Step 4: If yes return 1
Step5: If no return then call a
recursive function to calculate factorial

step6: Return the result
step7: Print factorial
step8: stop.

4. Swap two no using without using third variable.
step1: start
step2: Input the two value from user as a, and b
step3: Add the two number and store it in a
step4: Subtract the two number and store it in b.
step5: Again Subtract the two no as store it in a.
step6: Print the two swap no.
step7: End.

5. How to check a no is positive or Negative.
step1: Start
Step2: Input the number
step3: check if no is greater than 0, it (using if-else)
is positive.
step4: If number is less than 0, it is negative
Step5: Else a it is equal to zero
step6: End.

6. Write a Java program to find whether a given number is leap year or not.

step1: Start
step2: Assign the value to the variable
step3: Check if it is divisible by 4
step4: Check if it is not divible by 100
step5: Display leap year
step6: Else check if it is divisible by 400.
step7: Display leap year
step 8: End.

7. Write a program to print 1 to 10 without loop

step1 : Start
step2 : Run for loop from i = 1 to 10 with ~~Print all the number directly~~
step3: ~~through End~~. increment
step4:- Print the value of i.
step4 Output
step5 :- End.

8. Write a Java Program to print the digits of given number.

step 1: Start
step 2: ~~Initia~~ Declare n.
step 3: If ~~num~~ n is equal to 0 goto step4.
else to goto step 6

step4: check if i = n % 10,
step5: n = n / 10
step6: Print i
step7: check the step3.
step8: stop.
step9: Output.

9. Write a program to print all factors of given number.
step1: Start
step2: Take the value of n as input from us
step3: Run for loop from [redacted]
i=1 to num.
step4: check if num % i = 0.
step.5: Output
step 6: End.

10. Write a java program to find the s of the digit of given number.
step 1: Start
step 2: Declare an integer n.
step3: Initialize variable sum = 0
step 4: find remainder by %.
step5: Add it to sum.
step6: Divide n by 10.
step 7: Repeat the steps until it n becomes 0
step 8: End.

Q. Write a program to print 1 to 10 numbers without using loop

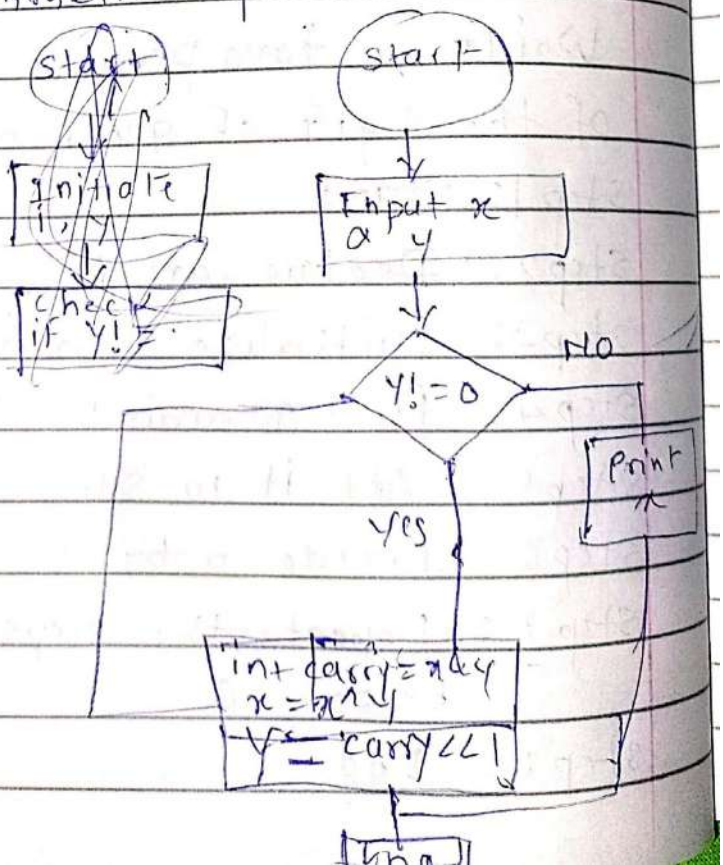
step1: start
step2: Read a number n
step3: call PrintN(1, n)
step4: PrintN(s, n)
step5: If s > n break
step6: Print s
step7: PrintN (++s, n)}
step8: End.

11. Write a program to find smallest of 3 numbers (a, b, c)

Step1: Start
Step2: Enter the value of a, b, c
Step3: Check if a<b then go to step 4 or else go to step 6
step 4: If c<a, is true then c is smallest go to step 7
step 5: If c<a is false then a is smallest got to step 7
step 6: If b<c is true, b is smallest else c is smallest.
Step 7: Output
Step 8: End.

12. How to add two no. without using java arithmetic operators.

Step1: S



13. Write a program to reverse a given no.

step1: Start

step2: Enter the number n. and initialize rev = 0.

step3: Run a loop for n! = 0 and get a remainder of number

step4: Multiply it with rev and add it the product with remainder and save it rev.

step 5: Divide n by 10.

step6: Repeat the process until n = 0

step7: Get reversed no.

step8: End.

14. Write a program to find GCD of two no.

step1: start

step2: Declare variables a, and b & gcd

step3: Run a loop for a & b from 1 to x and y

step4: Check that the number is complete divide x & y. and store it gcd.

step5: Print gcd

step6: End.

15. Write a progoam to LCM of two no.

Stepl: Start
Step2: Enter two numbers and assign vari. a, and b. Q intialize gcd=1
Step3: Run a loop for a & b from i=1 to max of a & b
Step4: Check that the number is completely ~~divisible~~ by divide a & b Store it il gcd.
Step5: Multiply the two no and divide it by gcd, and store it in LCM
Step6: Output the LCM
Step7: End.

16. Write a java program of LCM of two given no using prime factors Method:

1. Start step1: Start
Step2: Declare
Step3: Read n_1 and n_2
Step4: Call gcd(n_1, n_2)
Step5: If (n_2=0) then return n_1
Step6: gcd(n_2, n_1 % n_2);
Step7: (n_1 / gcd(n_1, n_2) * n_2
Step8: End.

17. Check whether the Given Number is a Palindrome or Not

Step1 : start

step2 : Input the no. of rows user eg n.

step 3 : ~~Run~~ Assign rem and temp variable.

step 4 : Start a loop until n! = 0 and temp = n

step5 : rem = num % 10 and get rem

Step6 : rev = ~~rem~~ (rev * 10) + n.

Step 7 : n = n / 10

Step 8 : Check if temp = = rev) it is a palindrome else it is not.

Step 9 : End

18. Write a program to print all the Prime factors of a given number