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(1). Check the given number is EVEN or ODD.
Step 1: Start.
Step 2: Read a number to N.
Step 3: Divide the number by 2 and store the remainder in R.
Step 4: If R = O Then
Step 5: Print "N is odd"
Step 6: else Print "N is even"
Step 7: Stop.
(2). Write a Java Program to find the Factorial of given number.
Step 1: Start.
Step 2: Read a number to N=5.
Step 3:Initialize i=1 and f= 1
Step 4:while i<=N then
   f=f*1
   j++
Step 5: Stop
(3). Find the Factorial of a number using Recursion
Step 1: Start.
Step 2: Read a number to N.
Step 3: call factorial(N)
Step 4: print factorial f
Step 5: stop
factorial(N)
Step 1:if N==1 or N==0 then return 1
Step 2: else f=N*factorial(N-1)
Step 3 return f
```

(4). Swap two numbers without using third variable approach.
Step 1: Start.
Step 2: Read a number to a and b.
Step 3 :a=a+b
Step 4 :a=a+b
Step 5 :b=a-b
Step 6 :a=a-b
step 7: print a and b.
Step 8: Stop.
(5). How to check the given number is Positive or Negative in Java?
Step 1: Start.
Step 2: Read a number to N.
Step 3: if N>0 then print number is positive .
Step 4 : else number is negative
Step 5: Stop.
(6). Write a Java Program to find whether given number is Leap year or NOT?
Step 1: Start.
Step 2: Read a number to N.
Step 3: Divide the number by 4 and store the remainder in R.
Step 4: If R = O.
Step 5: Print "N is leap year"
Step 6: Print "N is non leap year"
Step 7: Stop.

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(7). Write a Java Program to Print 1 To 10 Without Using Loop.
Step 1: Start.
Step 2: Read a number to N.
step 3:print 1;
step 4:print 2;
step 5:print 3;
step 6:print 4;
step 7:print 5;
step 8:print 6;
step 9:print 7;
step 10:print 8;
step 11:print 9;
step 12:print 10;
Step 13: Stop.
(8). Write a Java Program to find the smallest of 3 numbers (a,b,c)
Step 1: Start
Step 2: Read three numbers in variable a, b and c.
Step 3: If a>b and a>c then display "a is the greatest number"
     If b>a and b>c then display "b is the greatestnumber"
    else display "c is the greatestnumber"
Step 4: Stop
9. Write a Java Program to print all the Factors of the Given number.
Step 1: Start
Step 2: Read numbers in variable n.
Step 3 : for(i=1;i <= n/2;i++)
Step 4: then if n%i==0 print i
Step 5: else continue loop;
Step 6: Stop
```

10. Write a Java Program to find sum of the digits of a given number.

Step 1: Start.

Step 2: Read numbers in variable n

step 3: sum the remainder of the number

step 4: Divide the number by 10

step 5: Repeat the step 2 while number is greater than 0.

Step 6: Stop

11. Write a Java Program to find the smallest of 3 numbers (a,b,c)

Step 1: Start.

Step 2 read numbers in a, b, c.

step 3: Check if a is less than b.

step 4: If above condition is true, go to step 5, else go to step 7

step 5: Check if c is less than a.

step 6: If above condition is true, c is the smallest, else a is the smallest. Go to step 9.

step 7: Check if b is less than c.

step 8: If above condition is true, b is the smallest, else c is the smallest.

step 9: Stop.

12. How to add two numbers without using the arithmetic operators in Java?

Step 1: Start.

Step2: Read a number to a and b and i=1.

Step 3: for (i=1; i<=b; b++)

Step 4: then a++

step 5: return a.

```
13. Write a java program to Reverse a given number Step 1: Start.
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Step 2: Read a number to N.

step 3: initialize reverse =0.

step 4: Check whether digit>0 then go to step 5.;

step 5: reverse =reverse *10.;

step 6: reverse=reverse+digit%10.

step 7: digit =digit/10

step 8: Go to step 4step 9:print 7;

step 9: Print reverse

step 10: Stop

14. Write a Java Program to find GCD of two given numbers.

Step 1: Start.

Step 2: Read a number n1,n2,gce=1,i=1.

Step 3: Input n1 and n20.

Step 4: Repeat until i<=n1 and i<=n2

Step 5: If n1%i==0 && n2%i==0

Step 6: gcd = i

Step 7: print gcd

Step 8: stop

15. Write a java program to LCM of TWO given number.

Step 1: Initialize the positive integer variables A and B.

Step 2: Store the common multiple of A & B into the max variable.

Step 3: Validate whether the max is divisible by both variables A and B.

Step 4: If max is divisible, display max as the LCM of two numbers.

Step 5: Else, the value of max is increased, and go to step 3.

Step 6: Stop

```
Step 1. Start
Step 2. Initialize sum=0,temp,n and r.
Step 3. Read teamp and n.
Step 4. While(n>0)
       r=n%10
       sum=(sum*10)+r
        n=n/10
Step 5. Repeat step 4 till n=0
Step 6: check if temp== sum
Step 7: if step 6 is true print number is palindrome
Step 8: else print number is not palindrome.
19. To print the following series EVEN number Series 2 4 6 8 10 12 14 16.
Step 1: Start.
Step 2: Read a number to i=0.
Step 3. for(; i \le 17; i += 2).
step 4: Print i
step 5: stop.
20. To print the following series ODD number Series 1 3 5 7 9 11 13 ....
Step 1: Start.
Step 2: Read a number to i=1.
Step 3. for(; i \le 15; i += 2).
step 4: Print i
step 5: stop.
```

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