

## Java Coding Practice Assignment (Topic: Looping Statement)

1. Write a program which prints the even numbers between 1 and 100 in an increasing order
2. Take 10 integers from keyboard using loop and print their average value on the screen.
3. Calculate the sum of digits of a number given by user. E.g.-  
 INPUT: 123     OUTPUT: 6  
 INPUT: 12345     OUTPUT: 15
4. Write a program which reads a sequence of integers from the user and stop by displaying "Done" when the sum of these values exceeds 100.
5. Write a program which displays the sum of the strict divisors of an integer given by the user.  
 (Ex.- input-6 -> divisors of 6 are 1,2,3; by adding them we can get  $1+2+3=6$ ; So 6 will be the output  
 input-10 -> divisors of 6 are 1,2,5; by adding them we can get  $1+2+5=8$ ; So 8 will be the output)
6. Write a program which reads a positive number N from the user then indicates if N is prime or not.
7. Write a program to print all prime number in between 1 to 100.
8. Write a program which reads an integer n and displays the n-th Fibonacci number.
9. Write a program which displays a string with a space after each character.  
 (Ex.- abcd -> a b c d)
10. Write a program which displays the reverse of a String. (Ex.- abcd -> dcba)
11. Factorial of any number n is represented by n! and is equal to  $1*2*3*...*(n-1)*n$ .  
 E.g.-  
 $4! = 1*2*3*4 = 24$   
 $3! = 3*2*1 = 6$   
 $2! = 2*1 = 2$   
 Also,  
 $1! = 1$   
 $0! = 1$   
 Write a Java program to calculate factorial of a number.
12. Write a program which finds if a String is a Palindrome String or not.
13. A three digit number is called Armstrong number if sum of cube of its digit is equal to number itself.  
 E.g.- 153 is an Armstrong number because  $(1^3)+(5^3)+(3^3) = 153$ .  
 Write all Armstrong numbers between 100 to 500.
14. Draw a 10\*10 multiplication table using For loop.
15. Print multiplication table of 24, 50 and 29 using loop.
16. Take integer inputs from user until he/she presses q ( Ask to press q to quit after every integer input ). Print average and product of all numbers.
17. Print the following patterns using loop :

<b>A.</b> * **  ***  ****  *****	<b>B.</b> *  **  ***  ****  *****	<b>C.</b> *  ***  *****	<b>D.</b> *  * *  *****
<b>E.</b> *****  *****  *****  *****  *****	<b>F.</b> *****  * *  * *  * *  *****	<b>G.</b> *****  ***  ***  ***  *****	<b>H.</b> * * * * *  * * * *  * * *  * *  *  *
<b>I.</b> 1 12 123 1234 12345	<b>J.</b> *  ***  *****  ***  *	<b>K.</b> 1  22  333  4444  .  .  NNNNNN .. N	<b>L.</b> 