

### **Assignment – 3 - Loops**

#### **Mastering Java Basics - Youtube Series**

1. Print numbers from 1 to 100.
2. Print sum of numbers from 1 to 100.
3. Print even numbers from 100 to 200.
4. Print numbers from 300 to 200.
5. Print odd numbers from 300 to 200.
6. Print multiples of 5 from 100 to 200.
7. Write a program that accepts a number and print its multiplication table.
8. Write a program that accepts a number and print its reverse multiplication table.
9. Write a program that accepts a number and print its factorial value.
10. Write a program that accepts two numbers. Find the value of one number raised to the power of another. (without using pre-defined functions)
11. Write a program that accepts a number and print the number of digits present in this number. For example, if the number is 7322 then the number of digits are 4.
12. Write a program that accepts a number and print the number in reverse order. For example, if the number is 7322 then the reverse number is 2237.
13. Write a program that accepts a number and print the number in reverse order. For example, if the number is 7322 then the reverse number is 2237. The number should be printed outside the loop.
14. Write a program that accepts a n number (till the user wants) of integers, and then prints the sum of the even and odd integers.
15. Write a program that accepts a positive integer. It should then print a message indicating whether the number is a prime number or not.
16. Write a program to calculate HCF of two given number.
17. Write a program to enter the numbers till the user wants and at the end the program should display the largest and smallest numbers entered.
18. Write a program to print out all Armstrong numbers between 1 and 500. If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number.
19. For example,  $153 = (1 * 1 * 1) + (5 * 5 * 5) + (3 * 3 * 3)$
20. Write a program to print Fibonacci series of n terms where n is input by user :
21. 0 1 1 2 3 5 8 13 24 .....
22. Write a program to calculate the sum of following series where n is input by user.
23.  $1 + 1/2 + 1/3 + 1/4 + 1/5 + ..... 1/n$
24. Write a menu driven program with the following options
  - a. Table
  - b. Reverse Multiplication Table
  - c. Factorial value.
  - d. Fibonacci series
  - e. Armstrong numbers
  - f. Exit

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[https://www.youtube.com/playlist?list=PLzrb6iZd6X9Kia8eiW\\_jj4u8ljF93FMMB](https://www.youtube.com/playlist?list=PLzrb6iZd6X9Kia8eiW_jj4u8ljF93FMMB)