**JAVA ASSIMENT QUESTION**

**basic**

1. Input a year and find whether it is a leap year or not. ✓
2. Take two numbers and print the sum of both. ✓
3. Take a number as input and print the multiplication table for it. ✓
4. Take 2 numbers as inputs and find their HCF and LCM.
5. Keep taking numbers as inputs till the user enters ‘x’, after that print sum of all. ✓

Basic 1

1. Write a program to print whether a number is even or odd, also take input. ✓
2. Take name as input and print a greeting message for that name. ✓
3. Write a program to input principle, time, and rate (P, T, R) from the user and find Simple Interest. ✓
4. Take in two numbers and an operator (+, -, \*, /) and calculate the value. (Use if conditions) ✓
5. Take 2 numbers as input and print the largest number. ✓
6. Input currency in rupees and output in USD. ✓

Condition and loops

**Basic Java Programs**

1. Area Of Circle Java Program ✓
2. Area Of Triangle ✓
3. Area Of Rectangle Program ✓
4. Area Of Isosceles Triangle ✓
5. Area Of Parallelogram ✓
6. Area Of Rhombus ✓
7. Area Of Equilateral Triangle ✓
8. Perimeter Of Circle ✓
9. Perimeter Of Equilateral Triangle ✓
10. Perimeter Of Parallelogram ✓
11. Perimeter Of Rectangle ✓
12. Perimeter Of Square ✓
13. Perimeter Of Rhombus ✓
14. Volume Of Cone Java Program ✓
15. Volume Of Prism ✓
16. Volume Of Cylinder ✓
17. Volume Of Sphere ✓
18. Volume Of Pyramid ✓
19. Curved Surface Area Of Cylinder ✓
20. Total Surface Area Of Cube ✓
21. Fibonacci Series In Java Programs ✓
22. [Subtract the Product and Sum of Digits of an Integer](https://leetcode.com/problems/subtract-the-product-and-sum-of-digits-of-an-integer/) ✓
23. Input a number and print all the factors of that number (use loops). ✓
24. Take integer inputs till the user enters 0 and print the sum of all numbers (HINT: while loop) ✓
25. Take integer inputs till the user enters 0 and print the largest number from all.

**Intermediate Java Programs**

1. Factorial Program In Java ✓
2. Calculate Electricity Bill
3. Calculate Average Of N Numbers
4. Calculate Discount Of Product
5. Calculate Distance Between Two Points
6. Calculate Commission Percentage
7. Power In Java
8. Calculate Depreciation of Value
9. Calculate Batting Average
10. Calculate CGPA Java Program
11. Compound Interest Java Program
12. Calculate Average Marks
13. Addition Of Two Numbers
14. Sum Of N Numbers
15. Armstrong Number In Java
16. Find Ncr & Npr
17. Reverse A String In Java
18. Find if a number is palindrome or not
19. Future Investment Value
20. HCF Of Two Numbers Program
21. LCM Of Two Numbers
22. Java Program Vowel Or Consonant
23. Perfect Number In Java
24. Check Leap Year Or Not
25. Sum Of A Digits Of Number
26. Kunal is allowed to go out with his friends only on the even days of a given month. Write a program to count the number of days he can go out in the month of August.
27. Write a program to print the sum of negative numbers, sum of positive even numbers and the sum of positive odd numbers from a list of numbers (N) entered by the user. The list terminates when the user enters a zero.

Function

1. [Define two methods to print the maximum and the minimum number respectively among three numbers entered by the user.](https://www.java67.com/2019/05/how-to-find-largest-and-smallest-of-three-numbers-in-java.html) ✓
2. [Define a program to find out whether a given number is even or odd.](https://www.geeksforgeeks.org/java-program-to-check-if-a-given-integer-is-odd-or-even/) ✓
3. [A person is eligible to vote if his/her age is greater than or equal to 18. Define a method to find out if he/she is eligible to vote.](https://www.efaculty.in/java-programs/voting-age-program-in-java/) ✓
4. [Write a program to print the sum of two numbers entered by user by defining your own method.](https://code4coding.com/addition-of-two-numbers-in-java-using-method/) ✓
5. [Define a method that returns the product of two numbers entered by user.](https://code4coding.com/java-program-to-multiply-two-numbers-using-method/) ✓
6. [Write a program to print the circumference and area of a circle of radius entered by user by defining your own method.](https://beginnersbook.com/2014/01/java-program-to-calculate-area-and-circumference-of-circle/) ✓
7. [Define a method to find out if a number is prime or not.](https://www.geeksforgeeks.org/java-program-to-check-if-a-number-is-prime-or-not/) ✓
8. [Write a program that will ask the user to enter his/her marks (out of 100). Define a method that will display grades according to the marks entered as below:](https://www.techcrashcourse.com/2017/02/java-program-to-calculate-grade-of-students.html)

Marks Grade

91-100 AA

81-90 AB

71-80 BB

61-70 BC

51-60 CD

41-50 DD

<=40 Fail

1. [Write a program to print the factorial of a number by defining a method named 'Factorial'.](https://www.javatpoint.com/factorial-program-in-java) 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

1. [Write a function to find if a number is a palindrome or not. Take number as parameter.](https://www.geeksforgeeks.org/check-if-a-number-is-palindrome/)
2. Convert the programs in [flow of program](https://github.com/kunal-kushwaha/DSA-Bootcamp-Java/blob/main/assignments/01-flow-of-program.md), [first java](https://github.com/kunal-kushwaha/DSA-Bootcamp-Java/blob/main/assignments/02-first-java.md), [conditionals & loops](https://github.com/kunal-kushwaha/DSA-Bootcamp-Java/blob/main/assignments/03-conditionals-loops.md) assignments into functions.
3. [Write a function to check if a given triplet is a Pythagorean triplet or not.](https://www.geeksforgeeks.org/find-pythagorean-triplet-in-an-unsorted-array/) (A Pythagorean triplet is when the sum of the square of two numbers is equal to the square of the third number).
4. [Write a function that returns all prime numbers between two given numbers.](https://www.geeksforgeeks.org/program-to-find-prime-numbers-between-given-interval/) ✓
5. [Write a function that returns the sum of first n natural numbers.](https://www.geeksforgeeks.org/program-find-sum-first-n-natural-numbers/)