

JAVA Programs

1. Write a Java program to print 'Hello' on screen and your name on a separate line.
2. Write a Java program to print the sum of two numbers.
3. Write a Java program that takes two numbers as input and displays the product of two numbers.
4. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.
5. Write a Java program that takes a number as input and prints its multiplication table up to 10.
6. Write a Java program to print the area and perimeter of a circle.
7. Write a Java program to swap two variables.
8. Write a Java program to compare two numbers.
9. Write a Java program and compute the sum of an integer's digits.
10. Write a Java program to print odd numbers from 1 to 99. Prints one number per line.
11. Write a Java program to accept a number and check whether the number is even or not. Prints 1 if the number is even or 0 if odd.
12. Write a Java program to display the pattern like a right angle triangle with a number.

1

```
12
123
1234
12345
123456
1234567
12345678
123456789
12345678910
```

13. Write a program in Java to make such a pattern like a right angle triangle with a number which repeats a number in a row.

The pattern is as follows :

```
1
22
333
4444
```

14. Write a Java program to make such a pattern like a right angle triangle with the number increased by 1.

The pattern like :

```
1
2 3
4 5 6
7 8 9 10
```

- 15.** Write a Java program to make such a pattern like a pyramid with a number that repeats in the same row.

```
  1
 2 2
3 3 3
4 4 4 4
```

- 16.** Write a Java program to print Floyd's Triangle.
17. Write a Java program to display the pattern like a diamond.

```
  *
 * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
* * * * * * * * *
* * * * * * * * *
* * * * * * * *
* * * * * * *
* * * * * *
* * * * *
* * * *
* * *
*

```

- 18.** Write a Java program to display Pascal's triangle.
19. Write a Java program to generate the following * triangles.

```
* * * * *
 * * * *
  * * *
   * *
    *
     *
```

- 20.** Write a Java method to display the current date and time.
21. Write a Java method for extracting the first digit from a positive or negative integer.
22. Write a Java method that checks whether all the characters in a given string are vowels (a, e, i, o, u) or not. Return true if each character in the string is a vowel, otherwise return false.

23. Write a Java program to convert temperature from Fahrenheit to Celsius degrees.
24. Write a Java program that reads a number in inches and converts it to meters.
Note: One inch is 0.0254 meter.
25. Write a Java program that reads an integer between 0 and 1000 and adds all the digits in the integer.
26. Write a Java program to convert minutes into years and days.
27. Write a Java program that accepts two integers from the user and prints the sum, the difference, the product, the average, the distance (the difference between the integers), the maximum (the largest of the two integers), and the minimum (the smallest of the two integers).
28. Write a Java program to break an integer into a sequence of digits.
29. Write a Java program that takes a number from the user and generates an integer between 1 and 7. It displays the weekday name.
30. Write a Java program to find the number of days in a month.

Test Data

Input a month number: 2

Input a year: 2016

Expected Output :

February 2016 has 29 days

31. Write a Java program that requires the user to enter a single character from the alphabet. Print Vowel or Consonant, depending on user input. If the user input is not a letter (between a and z or A and Z), or is a string of length > 1, print an error message.
32. Write a Java program to display the first 10 natural numbers.
33. Write a Java program to display the cube of the given number up to an integer.
34. Write a Java recursive method to calculate the factorial of a given positive integer.
35. Write a Java recursive method to calculate the nth Fibonacci number.
36. Write a Java recursive method to check if a given string is a palindrome.

37. Write a Java program to create a class called "Book" with instance variables title, author, and price. Implement a default constructor and two parameterized constructors:

- One constructor takes title and author as parameters.
- The other constructor takes title, author, and price as parameters.
- Print the values of the variables for each constructor.

38. Write a Java program to create a class called Shape with a method called getArea(). Create a subclass called Rectangle that overrides the getArea() method to calculate the area of a rectangle.

39. a program to create a class known as "BankAccount" with methods called deposit() and withdraw(). Create a subclass called SavingsAccount that overrides the withdraw() method to prevent withdrawals if the account balance falls below one hundred.

40. Write a Java program to create a class called Person with private instance variables name, age, and country. Provide public getter and setter methods to access and modify these variables.

41. Write a Java program to create a class Vehicle with a method called speedUp(). Create two subclasses Car and Bicycle. Override the speedUp() method in each subclass to increase the vehicle's speed differently.

42. Write a Java program to create an interface Shape with the getArea() method. Create three classes Rectangle, Circle, and Triangle that implement the Shape interface. Implement the getArea() method for each of the three classes.

43. Write a Java program that throws an exception and catch it using a try-catch block.

44. Write a Java program to create a method that takes an integer as a parameter and throws an exception if the number is odd.

45. Write a Java program to create a method that takes a string as input and throws an exception if the string does not contain vowels.

46. Write a Java program to create a basic Java thread that prints "Hello, World!" when executed.

47. Write a Java program that creates two threads to find and print even and odd numbers from 1 to 20.
48. Write a Java program to sum values of an array.
49. Write a Java program to remove a specific element from an array.
50. Write a Java program to insert an element (specific position) into an array.