

1. Write a Java program to print 'Hello' on screen and then print your name on a separate line.
2. Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Test Data:

Input first number: 125

Input second number: 24

Expected Output :

- a.  $125 + 24 = 149$
  - b.  $125 - 24 = 101$
  - c.  $125 \times 24 = 3000$
  - d.  $125 / 24 = 5$
  - e.  $125 \bmod 24 = 5$
3. Write a Java program to compute the specified expressions and print the output.

*Test Data:*

$((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))$

*Expected Output*

2.138888888888889

4. Write a Java program to print the area and perimeter of a circle.

*Test Data:*

Radius = 7.5

*Expected Output*

Perimeter is = 47.12388980384689

Area is = 176.71458676442586

5. Write a Java program to find the value of specified expression.

$101 + 0) / 3$

b)  $3.0e-6 * 10000000.1$

c) `true && true`

d) `false && true`

e) `(false && false) || (true && true)`

f) (false || false) && (true && true)

6. Write a Java program to convert temperature from Fahrenheit to Celsius degree.

*Test Data*

Input a degree in Fahrenheit: 212

*Expected Output:*

212.0 degree Fahrenheit is equal to 100.0 in Celsius

7. Write a Java program that reads a number in inches, converts it to meters.

Note: One inch is 0.0254 meter.

*Test Data*

Input a value for inch: 1000

*Expected Output :*

1000.0 inch is 25.4 meters

8. Write a Java program that reads an integer between 0 and 1000 and adds all the digits in the integer.

*Test Data*

Input an integer between 0 and 1000: 565

*Expected Output :*

The sum of all digits in 565 is 16

9. Write a Java program to convert minutes into a number of years and days.

*Test Data*

Input the number of minutes: 3456789

*Expected Output :*

3456789 minutes is approximately 6 years and 210 days

10. Write a Java program that prints the current time in GMT.

*Test Data*

Input the time zone offset to GMT: 256

*Expected Output:*

Current time is 23:40:24

11. Write a Java program to takes the user for a distance (in meters) and the time was taken (as three numbers: hours, minutes, seconds), and display the speed, in meters per second,

kilometers per hour and miles per hour (hint: 1 mile = 1609 meters).

*Test Data*

Input distance in meters: 2500

Input hour: 5

Input minutes: 56

Input seconds: 23

*Expected Output :*

Your speed in meters/second is 0.11691531

Your speed in km/h is 0.42089513

Your speed in miles/h is 0.26158804

12. Write a Java program to break an integer into a sequence of individual digits.

*Test Data*

Input six non-negative digits: 123456

*Expected Output :*

1 2 3 4 5 6

13. Write a Java program to test whether a given double/float value is a finite floating-point value or not.
14. Write a Java program to compare two given signed and unsigned numbers.
15. Write a Java program to compute the floor division and the floor modulus of the given dividend and divisor.
16. Write a Java program to get the next floating-point adjacent in the direction of positive and negative infinity from a given float/double number.
17. Write a Java program to print an int, a double and a char on screen.
18. Print the ASCII value of the character 'h'.
19. Write a program to assign a value of 100.235 to a double variable and then convert it to int.
20. Write a program to add 3 to the ASCII value of the character 'd' and print the equivalent character.
21. Write a program to add an integer variable having value 5 and a double variable having value 6.2
22. Suppose the values of variables 'a' and 'b' are 6 and 8 respectively, write two programs to swap the values of the two variables.  
1 - first program by using a third variable

2 - second program without using any third variable

( Swapping means interchanging the values of the two variables E.g.- If entered value of x is 5 and y is 10 then after swapping the value of x and y should become 10 and 5 respectively.)

23. The total number of students in a class are 90 out of which 45 are boys. If 50% of the total students secured grade 'A' out of which 20 are boys, then write a program to calculate the total number of girls getting grade 'A'.

24. Take a 4 digit number. Write a program to display a number whose digits are 2 greater than the corresponding digits of the number TAKEN.

For example, if the number which was taken is 5696, then the displayed number should be 7818.

25. Write a program to reverse a 3-digit number.

E.g.-Number : 132      Output : 231