

## **Play around with Data types**

**1.** 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

**2.** 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

**3.** 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

**4.** Write a Java program to compute body mass index (BMI).

BMI: The BMI is defined as the body mass divided by the square of the body height, and is universally expressed in units of  $\text{kg}/\text{m}^2$ , resulting from mass in kilograms and height in metres.

Test Data

Input weight in pounds: 452

Input height in inches: 72

Expected Output:

Body Mass Index is 61.30159143458721

**5.** 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

**6.** Write a Java program that reads a number and display the square, cube, and fourth power.

Test Data

Number entered :2

Expected Output:

Square: .4

Cube: .8

Fourth power: 16

**7.** Write a Java program that accepts two integers from the user and then prints the sum, the difference, the product, the average, the distance (the difference between integer), the maximum (the larger of the two integers), the minimum (smaller of the two integers).

Test Data

Input 1st integer: 25

Input 2nd integer: 5

Expected Output :

Sum of two integers: 30

Difference of two integers: 20

Product of two integers: 125

Average of two integers: 15.00

Distance of two integers: 20

Max integer: 25

Min integer: 5