**Java program for binary to decimal conversion**

There are two following ways to convert binary number to decimal number:

1) Using [Integer.parseInt() method](http://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html#parseInt%28java.lang.String,%20int%29) of Integer class.  
2) Do conversion by writing your own logic without using any predefined methods.

**Method 1: Binary to Decimal conversion using Integer.parseInt() method**

import java.util.Scanner;

class BinaryToDecimal {

public static void main(String args[]){

Scanner input = new Scanner( System.in );

System.out.print("Enter a binary number: ");

String binaryString =input.nextLine();

System.out.println("Output: "+Integer.parseInt(binaryString,2));

}

}

**Output:**

Enter a binary number: 1101

Output: 13

**Method 2: Conversion without using parseInt**

public class Details {

public int BinaryToDecimal(int binaryNumber){

int decimal = 0;

int p = 0;

while(true){

if(binaryNumber == 0){

break;

} else {

int temp = binaryNumber%10;

decimal += temp\*Math.pow(2, p);

binaryNumber = binaryNumber/10;

p++;

}

}

return decimal;

}

public static void main(String args[]){

Details obj = new Details();

System.out.println("110 --> "+obj.BinaryToDecimal(110));

System.out.println("1101 --> "+obj.BinaryToDecimal(1101));

System.out.println("100 --> "+obj.BinaryToDecimal(100));

System.out.println("110111 --> "+obj.BinaryToDecimal(110111));

}

}

**Output:**

110 --> 6

1101 --> 13

100 --> 4

110111 --> 55