**Java program to convert decimal to binary**

There are three following ways to convert Decimal number to binary number:

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

**Method 1: Using toBinaryString() method**

class DecimalBinaryExample{

public static void main(String a[]){

System.out.println("Binary representation of 124: ");

System.out.println(Integer.toBinaryString(124));

System.out.println("\nBinary representation of 45: ");

System.out.println(Integer.toBinaryString(45));

System.out.println("\nBinary representation of 999: ");

System.out.println(Integer.toBinaryString(999));

}

}

**Output:**

Binary representation of 124:

1111100

Binary representation of 45:

101101

Binary representation of 999:

1111100111

**Method 2: Without using predefined method**

class DecimalBinaryExample{

public void convertBinary(int num){

int binary[] = new int[40];

int index = 0;

while(num > 0){

binary[index++] = num%2;

num = num/2;

}

for(int i = index-1;i >= 0;i--){

System.out.print(binary[i]);

}

}

public static void main(String a[]){

DecimalBinaryExample obj = new DecimalBinaryExample();

System.out.println("Binary representation of 124: ");

obj.convertBinary(124);

System.out.println("\nBinary representation of 45: ");

obj.convertBinary(45);

System.out.println("\nBinary representation of 999: ");

obj.convertBinary(999);

}

}

**Output:**

Binary representation of 124:

1111100

Binary representation of 45:

101101

Binary representation of 999:

1111100111

**Method 3: Decimal to Binary using Stack**

import java.util.\*;

class DecimalBinaryStack

{

public static void main(String[] args)

{

Scanner in = new Scanner(System.in);

// Create Stack object

Stack<Integer> stack = new Stack<Integer>();

// User input

System.out.println("Enter decimal number: ");

int num = in.nextInt();

while (num != 0)

{

int d = num % 2;

stack.push(d);

num /= 2;

}

System.out.print("\nBinary representation is:");

while (!(stack.isEmpty() ))

{

System.out.print(stack.pop());

}

System.out.println();

}

}

**Output:**

Enter decimal number:

999

Binary representation is:1111100111