**PROBLEM 3**

Binary to Decimal Converter

A binary number is a sequence of bits (binary digits – 0’s and 1’s) of the form  
BnBn-1……B1 B0, where each Bi is a bit.

The decimal equivalent is calculated by Bn \* 2n+ Bn-1 \* 2n-1 + … + B1 \* 2 + B0.

Write a program to input a binary number and output the decimal equivalent.

The sample input will not have more than 8 individual bits (i.e., the largest value to be entered is 11111111).

**Example 1**

Enter binary number: 101  
In decimal: 5

**Example 2**

Enter binary number: 11111  
In decimal: 31