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