## **binaryToDec**

Write a program that reads in a binary number, converts the binary number into the equivalent decimal number (i.e. converts the number with base value 2 to base value 10) and prints the converted decimal number to the screen. You do not need to check user input errors in the program.

A sample program template is given below:

```
#include <stdio.h>
#include <math.h>
int main()
{
    /* Write your code here */
    return 0;
}
```

Some test input and output sessions are given below:

```
(1) Test Case 1
    Enter a binary number:
    101
    The equivalent decimal number: 5

(2) Test Case 2
    Enter a binary number:
    11110
    The equivalent decimal number: 30

(3) Test Case 3
    Enter a binary number:
    110010
    The equivalent decimal number: 50

(4) Test Case 4
    Enter a binary number:
    10010110
    The equivalent decimal number: 150
```