decToBinary

Write a program that reads in a positive decimal number, converts the decimal number into the equivalent binary number (i.e. converts the number with base value 10 to base value 2) and prints the converted binary 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 decimal number:
5
The equivalent binary number: 101
```

(2) Test Case 2

```
Enter a decimal number:
30
The equivalent binary number: 11110
```

(3) Test Case 3

```
Enter a decimal number:
100
The equivalent binary number: 1100100
```

(4) Test Case 4

```
Enter a decimal number:
150
The equivalent binary number: 10010110
```

```
#include <stdio.h>
#include <math.h>
int main()
{
   int quotient, remainder,binary=0, temp = 1;

   printf("Enter a decimal number:\n");
   scanf("%d",&quotient);


   while(quotient!=0)
   {
      remainder = quotient%2;
      quotient = quotient/2;
      binary = binary + remainder*temp;
      temp = temp*10;

   }

   printf("The equivalent binary number:
%d\n",binary);

  return 0;
}
```