

## **binaryToOctal**

Write a program that reads in a binary number, converts the binary number into the equivalent octal number (i.e. converts the number with base value 2 to base value 8) and prints the converted octal 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 octal number: 5
```

(2) Test Case 2

```
Enter a binary number:
11000
The equivalent octal number: 30
```

(3) Test Case 3

```
Enter a binary number:
100000
The equivalent octal number: 40
```

(4) Test Case 4

```
Enter a binary number:
1100000
The equivalent octal number: 140
```