

## decToOctal

Write a program that reads in a positive decimal number, converts the decimal number into the equivalent octal number (i.e. converts the number with base value 10 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 decimal number:

5

The equivalent octal number: 5

(2) Test Case 2

Enter a decimal number:

30

The equivalent octal number: 36

(3) Test Case 3

Enter a decimal number:

100

The equivalent octal number: 144

(4) Test Case 4

Enter a decimal number:

300

The equivalent octal number: 454

```
#include <stdio.h>
#include <math.h>
int main()
{
    int quotient,i=0,octal=0,temp = 1;
    int remainder;
    printf("Enter a decimal number:\n");
    scanf("%d",&quotient);

    while(quotient!=0)
    {
        remainder = quotient%8;
        quotient = quotient/8;

        octal = octal+ remainder*temp;
        temp = temp*10;
    }

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

    return 0;
}
```

prints from the  
left instead