**OCTAL TO DECIMAL CONVERSION:**

**EXP NO:30**

**AIM:**To write a C program to implement octal to decimal conversion.

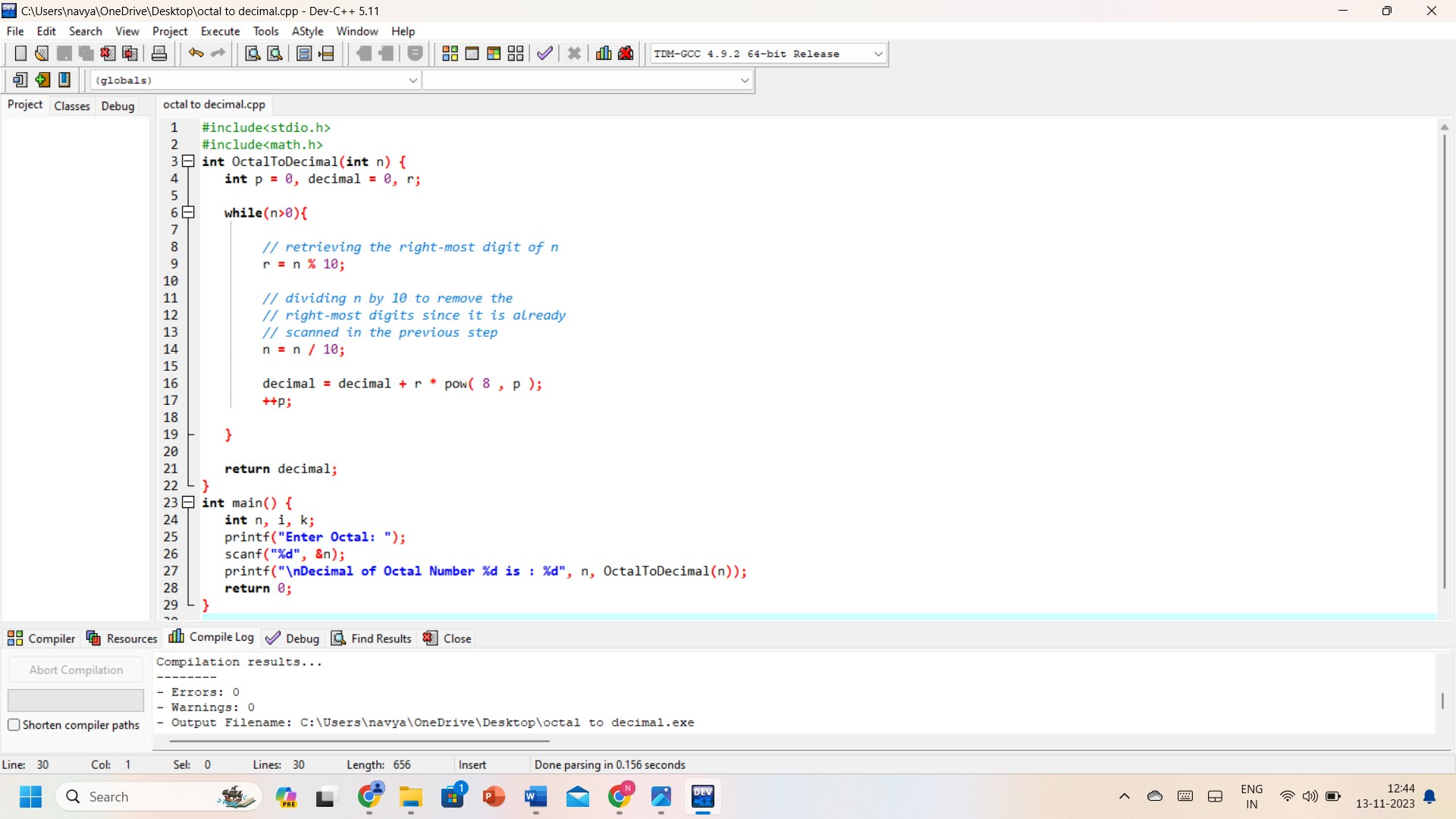
**APPARATUS:** DEV C++

**ALGORITHM:**

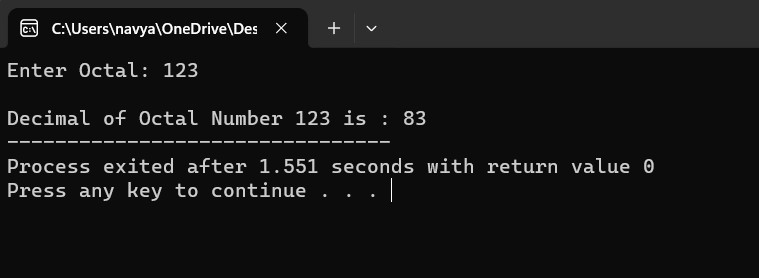
1)      Store the remainder when the number is divided by 8 in an array.  
2)      Divide the number by 8 now  
3)      Repeat the above two steps until the number is not equal to 0.  
4)      Print the array in reverse order now.

**PROGRAM:**#include<stdio.h>  
#include<math.h>  
int OctalToDecimal(int n) {  
   int p = 0, decimal = 0, r;  
     
   while(n>0){  
          
        // retrieving the right-most digit of n  
        r = n % 10;  
          
        // dividing n by 10 to remove the  
        // right-most digits since it is already  
        // scanned in the previous step  
        n = n / 10;  
          
        decimal = decimal + r \* pow( 8 , p );      
        ++p;  
          
   }  
     
   return decimal;  
}  
int main() {  
   int n, i, k;  
   printf("Enter Octal: ");  
   scanf("%d", &n);  
   printf("\nDecimal of Octal Number %d is : %d", n, OctalToDecimal(n));  
   return 0;  
}

**INPUT:**



**OUTPUT:**



**RESULT:** Thus, the program was executed successfully using DevC++.