22.Write a program to convert Decimal number to an Octal number using any high level language.

AIM:

Writing a c program to convert decimal to octal number.

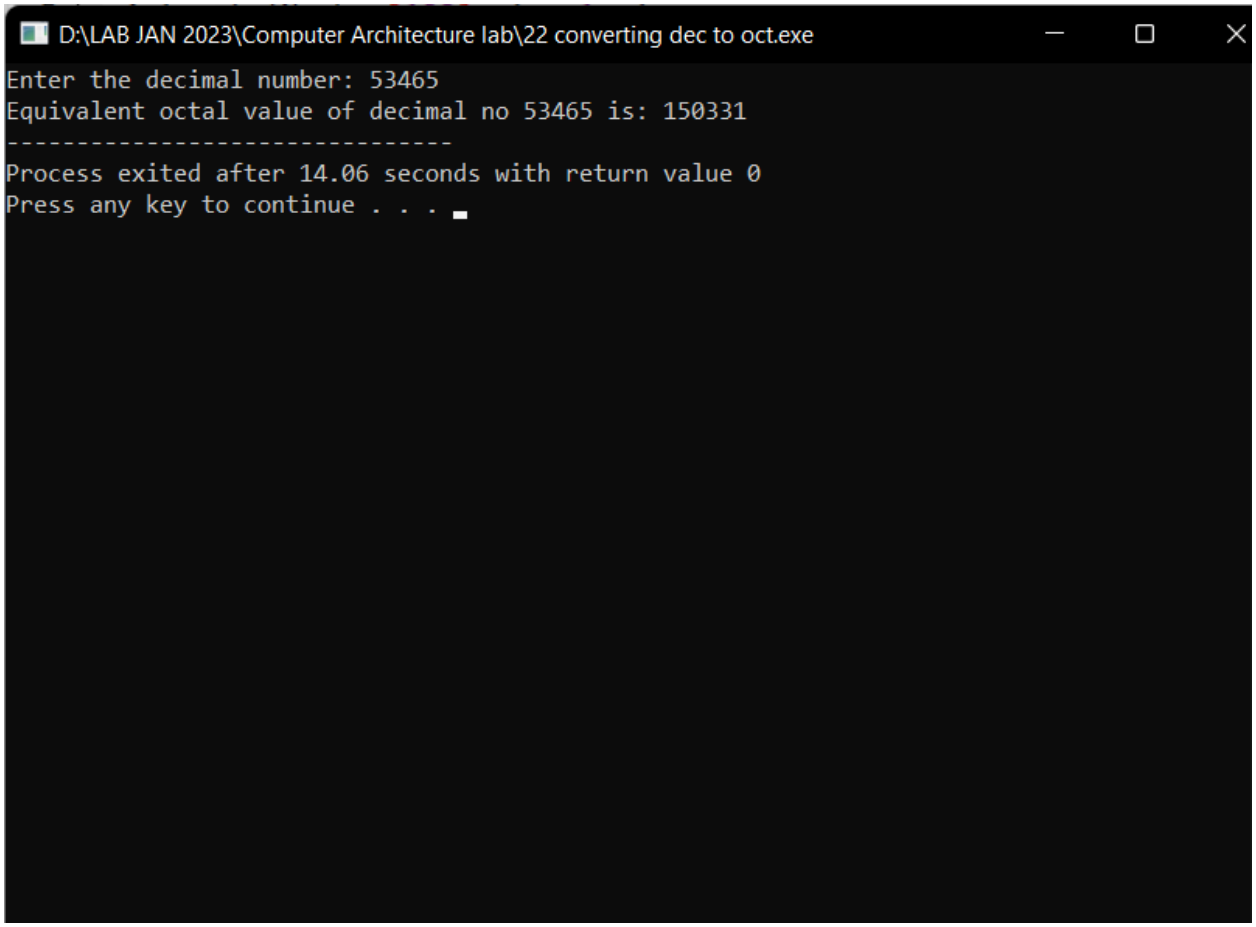
ALGORITHM:

1.Store the remainder when the number is divided by 8 in an array.
2.Divide the number by 8 none
3.Repeat the above steps until the number is not equal to 0.
4.Print the array in reverse order now.

PROGRAM:

```
#include <stdio.h>
int main()
{
 long decimalnum, remainder, quotient,octalnum=0;
 int octalNumber[100], i = 1, j;
 printf("Enter the decimal number: ");
 scanf("%ld", &decimalnum);
 quotient = decimalnum;
 //Storing remainders until number is equal to zero
 while (quotient != 0)
 {
 octalNumber[i++] = quotient % 8;
 quotient = quotient / 8;
 }
 //Converting stored remainder values in corresponding octal number
 for (j = i - 1; j > 0; j--)
 octalnum = octalnum*10 + octalNumber[j];
 printf("Equivalent octal value of decimal no %d is: %d ", decimalnum,octalnum);
 return 0;
}
```

OUTPUT:



RESULT:

Thus the program for decimal to octal conversion is successfully executed.