AIM:

To write a C program to implement decimal
to octal conversion.

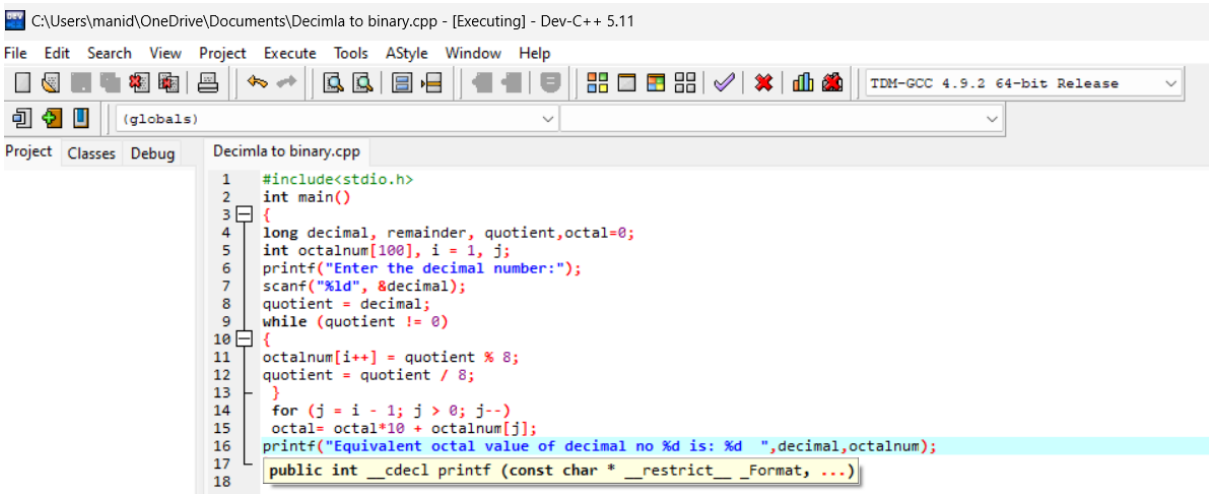
ALGORITHM:

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.

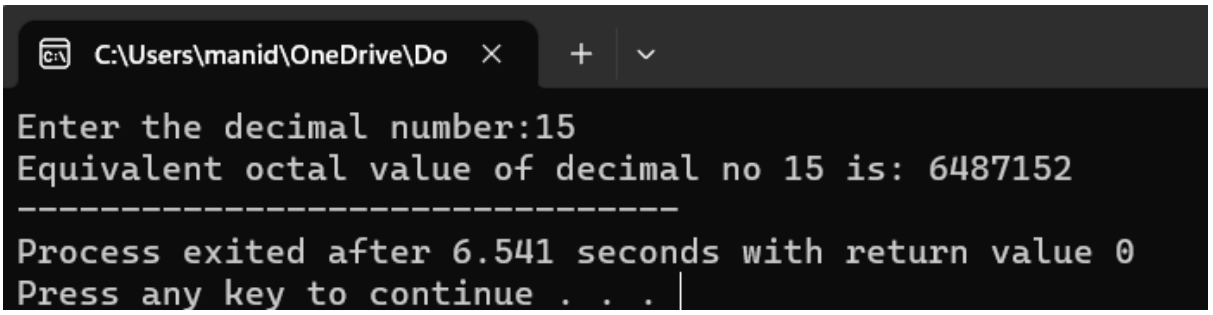
PROGRAM:

```
#include<stdio.h>
int main()
{
long decimal, remainder, quotient,octal=0;
int octalnum[100], i = 1, j;
printf("Enter the decimal number:");
scanf("%ld", &decimal);
quotient = decimal;
while (quotient != 0)
{
octalnum[i++] = quotient % 8;
quotient = quotient / 8;
 }
 for (j = i - 1; j > 0; j--)
 octal= octal*10 + octalnum[j];
printf("Equivalent octal value of decimal no %d is: %d  ",decimal,octalnum);
}
```

INPUT:



OUTPUT:



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