

AIM:

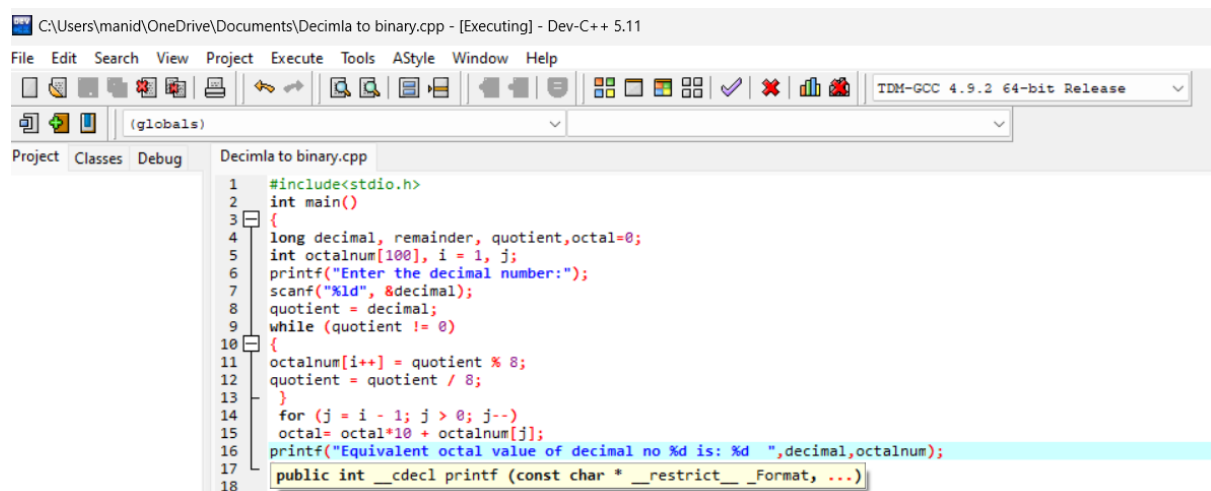
To write a C program to implement decimal to octal conversion.

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.

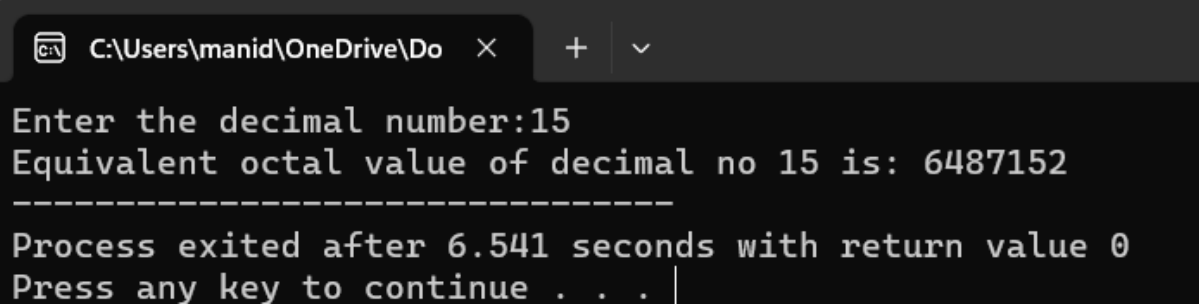
PROGRAM:

```
#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:

```
C:\Users\manid\OneDrive\Documents\Decimla to binary.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug Decimla to binary.cpp
1 #include<stdio.h>
2 int main()
3 {
4 long decimal, remainder, quotient,octal=0;
5 int octalnum[100], i = 1, j;
6 printf("Enter the decimal number:");
7 scanf("%ld", &decimal);
8 quotient = decimal;
9 while (quotient != 0)
10 {
11 octalnum[i++] = quotient % 8;
12 quotient = quotient / 8;
13 }
14 for (j = i - 1; j > 0; j--)
15 octal= octal*10 + octalnum[j];
16 printf("Equivalent octal value of decimal no %d is: %d ",decimal,octalnum);
17
18 public int __cdecl printf (const char * __restrict __Format, ...)
```

OUTPUT:



```
C:\Users\manid\OneDrive\Do × + v
Enter the decimal number:15
Equivalent octal value of decimal no 15 is: 6487152
-----
Process exited after 6.541 seconds with return value 0
Press any key to continue . . . |
```

RESULT: Thus

the program was executed successfully using DevC++.