

**AIM:**

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

**ALGORITHM:**

1)

Check if your number is odd or even.

2)

If it's even, write 0 (proceeding backwards, adding binary digits to the left of the result).

3)

Otherwise, if it's odd, write 1 (in the same way).

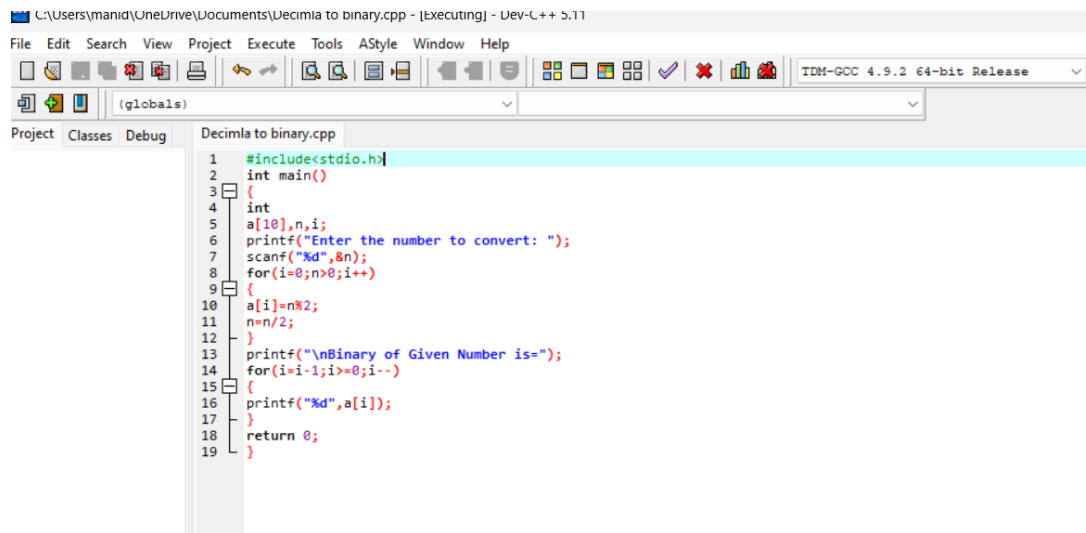
4) Divide

your number by 2 (dropping any fraction) and go back to step 1. Repeat until your original number is 0.

**PROGRAM:**

```
#include<stdio.h>
int main()
{
    int
    a[10],n,i;
    printf("Enter the number to convert: ");
    scanf("%d",&n);
    for(i=0;n>0;i++)
    {
        a[i]=n%2;
        n=n/2;
    }
    printf("\nBinary of Given Number is=");
    for(i=i-1;i>=0;i--)
    {
        printf("%d",a[i]);
    }
    return 0;
}
```

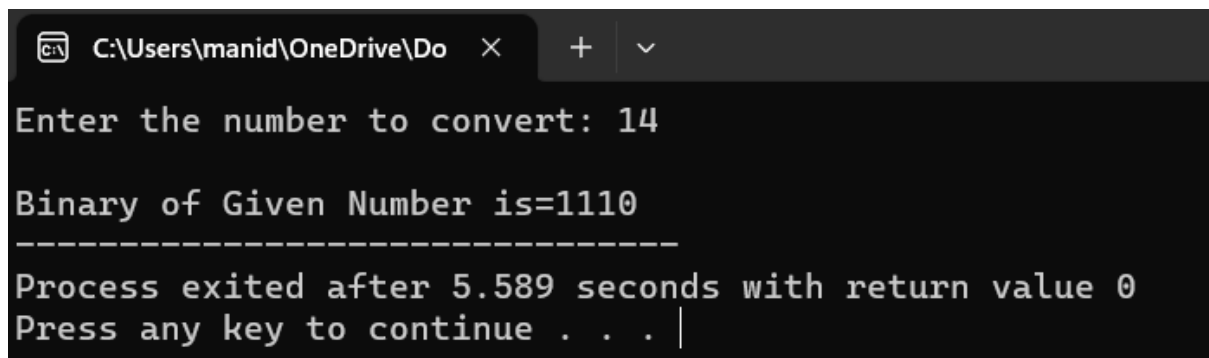
## INPUT:



The screenshot shows the Dev-C++ IDE interface. The title bar indicates the file path: C:\Users\manid\OneDrive\Documents\Decimla to binary.cpp - [Executing] - Dev-C++ 5.11. The menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, and Help. The toolbar contains various icons for file operations and execution. The compiler is set to TDM-GCC 4.9.2 64-bit Release. The project explorer on the left shows 'Decimla to binary.cpp'. The main editor window displays the following C++ code:

```
1  #include<stdio.h>
2  int main()
3  {
4      int
5      a[10],n,i;
6      printf("Enter the number to convert: ");
7      scanf("%d",&n);
8      for(i=0;n>0;i++)
9      {
10         a[i]=n%2;
11         n=n/2;
12     }
13     printf("\nBinary of Given Number is=");
14     for(i=i-1;i>=0;i--)
15     {
16         printf("%d",a[i]);
17     }
18     return 0;
19 }
```

## OUTPUT:



The screenshot shows a Windows command prompt window with the following output:

```
C:\Users\manid\OneDrive\Do  ×  +  v
Enter the number to convert: 14

Binary of Given Number is=1110
-----
Process exited after 5.589 seconds with return value 0
Press any key to continue . . . |
```

## RESULT: Thus

the program was executed successfully using DevC++.