

## EXP NO: 25 DECIMAL TO BINARY CONVERSION

**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>

#include<stdlib.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]);

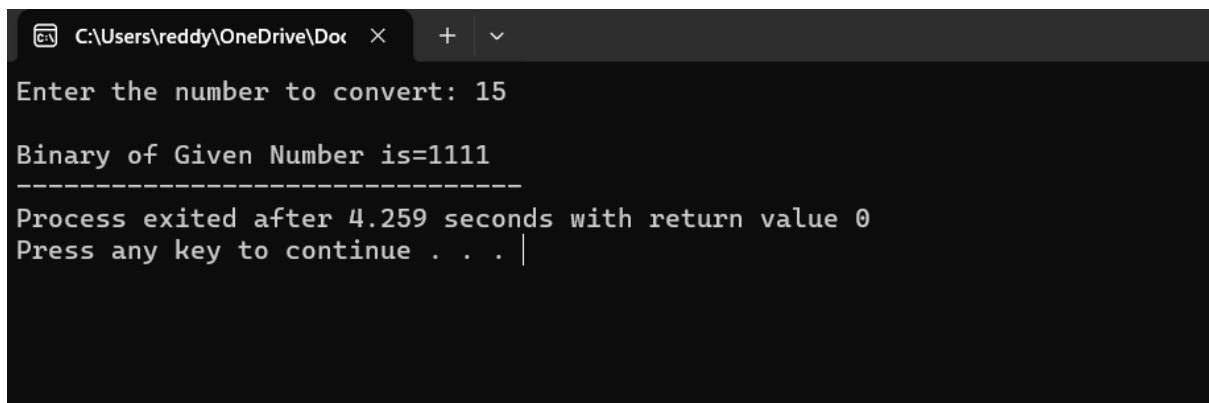
}

return

0;

}
```

### **INPUT&OUTPUT**



```
C:\Users\reddy\OneDrive\Doc × + v
Enter the number to convert: 15
Binary of Given Number is=1111
-----
Process exited after 4.259 seconds with return value 0
Press any key to continue . . . |
```

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