EXP NO: 25 DECIMAL TO BINARY CONVERSION
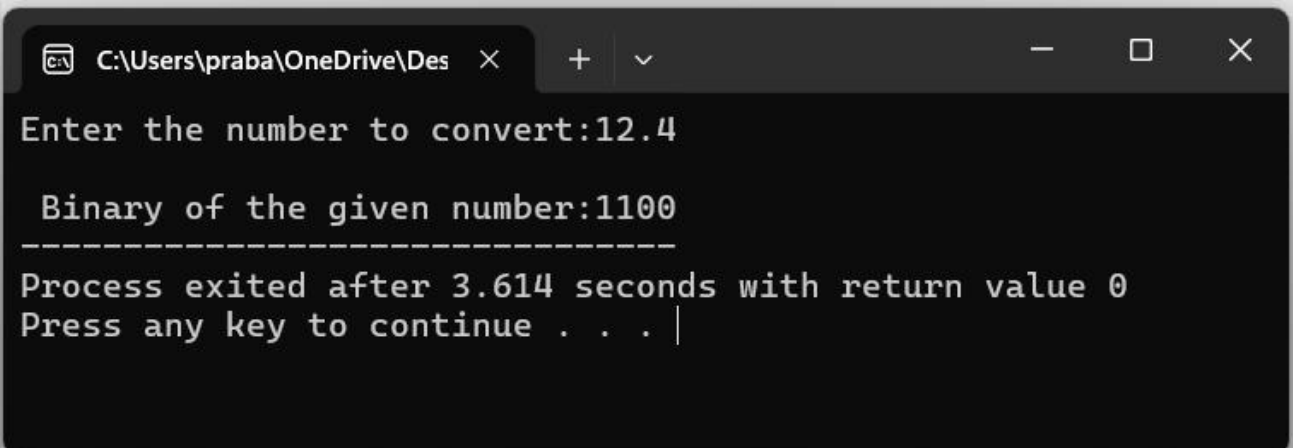
AIM: To write a C program to implement decimal to binary conversion.

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/OUTPUT SS:

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

```
C:\Users\praba\OneDrive\Des   ×    +   ∨              —   □   ×

Enter the number to convert:12.4

 Binary of the given number:1100
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Process exited after 3.614 seconds with return value 0
Press any key to continue . . . |
```

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