

## **DECIMAL TO BINARY CONVERSION**

**EXP NO: 25**

### **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:**

Output
<pre>/tmp/881Ku21JVI.o Enter the number to convert: 5 Binary of Given Number is=101</pre>

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