

**//WAP to convert decimal to binary**

**/\*Algorithm:**

- 1.Read a decimal number to convert into binary number**
- 2.Define a d2b() with no return type and with decimal number as argument.**
- 3.perform decimal to binary using a user defined function i.e, d2b(decimal 2 binary).**
- 3.print the binary number value of given decimal number.**

**\*/**

```
#include<stdio.h>                                //include standard input and output header file using preprocessor directive
void d2b(int );                                //declare a function with no return type and decimal as argument
int main()                                     //start main()
{
    setbuf(stdout,NULL);
    int v_decimal;                             //declare an integer variable to input the decimal
    puts("Enter the number to convert decimal to binary:"); //display a statement to enter decimal
    scanf("%d",&v_decimal);                   //input the decimal using scanf()
    d2b(v_decimal);                             //call d2b()
}                                               //end main()
void d2b(int v_dec)                             //define a d2b() function
{
    int temp;
    int rem[32],coef,i=0,cnt=0;
    //declare rem[32] array to store the binary converted decimal, i for referencing, coef and cnt.
    temp=v_dec;
    while(v_dec)                                //define while() loop in order to get the binary value for given decimal
    {
        rem[i]=v_dec%2;
        coef=v_dec/2;
        v_dec=coef;
        i++;
        cnt++;
    }
    if(cnt<8)
    {
        cnt=8;
    }
    printf("Binary value for %d is ",temp);
    for(i=cnt-1;i>=0;i--)                       //define a for loop to print the binary value of it.
    {
        if(rem[i]==0||rem[i]==1)
        {
            printf("%d ",rem[i]);
        }
        else
        {
            rem[i]=0;
            printf("%d ",rem[i]);
        }
    }
}
```