

## HEXADECIMAL TO DECIMAL CONVERSION

### EXP NO: 27

**AIM:** To write a C program to implement hexadecimal to decimal conversion.

#### ALGORITHM:

- 1) Start from the right-most digit. Its weight (or coefficient) is 1.
- 2) Multiply the weight of the position by its digit. Add the product to the result.  
(0=0, 1=1, 2=2, ... 9=9, A=10, B=11, C=12, D=13, E=14, F=15)
- 3) Move one digit to the left. Its weight is 16 times the previous weight.
- 4) Repeat 2 and 3 until you go through all hexadecimal digits.

#### PROGRAM:

```
#include<stdio.h>

int main()
{
    int n;

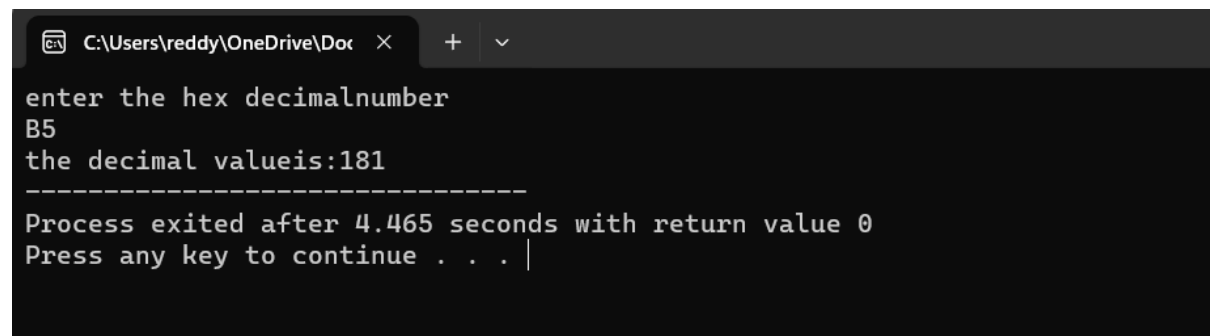
    printf("enter the hex decimalnumber");

    scanf("%x",&n);

    printf("the decimal valueis:%d",n);

    return 0;
}
```

#### INPUT&OUTPUT:

A screenshot of a terminal window with a dark background. The window title bar shows the file path 'C:\Users\reddy\OneDrive\Doc' and standard window controls. The terminal output shows the program's execution: it prompts 'enter the hex decimalnumber', the user enters 'B5', and the program outputs 'the decimal valueis:181'. A separator line of dashes follows. At the bottom, it says 'Process exited after 4.465 seconds with return value 0' and 'Press any key to continue . . . |'.

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