

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 decimal
number");
    scanf("%x",&n);
    printf("the decimal value
is:%d",n);
    return 0;
}
```

INPUT & OUTPUT:

 C:\Dev-Cpp\Computer Architecture (192212462) Exp 25.exe

```
enter the hex decimal number
3A8C
the decimal value is:14988
-----
Process exited after 17.95 seconds with return value 0
Press any key to continue . . .
```

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