

HEXADECIMAL TO DECIMAL CONVERSION

EXP NO: 22

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.

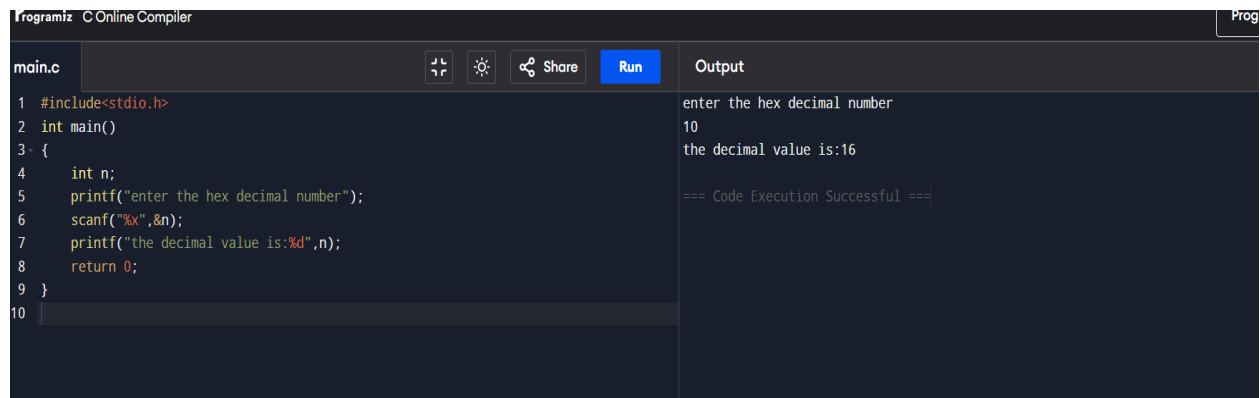
PROGRAM:

```
#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:

10

OUTPUT:



The screenshot shows a web-based C compiler interface. The top bar includes the text 'Programiz C Online Compiler' and a 'Prog' tab. Below the bar, the code editor displays a C program in 'main.c'. The code prompts for a hex decimal number, reads the input '10', and prints the decimal value '16'. To the right of the code editor is an 'Output' pane showing the program's execution: 'enter the hex decimal number', '10', 'the decimal value is:16', and a success message '=== Code Execution Successful ==='. The code editor has a dark theme and includes icons for file management, settings, and sharing, along with a 'Run' button.

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     printf("enter the hex decimal number");
6     scanf("%x",&n);
7     printf("the decimal value is:%d",n);
8     return 0;
9 }
10
```

enter the hex decimal number
10
the decimal value is:16
=== Code Execution Successful ===

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