

Convert Hexadecimal to Decimal

```
#include<stdio.h>
#include <math.h>
#include <string.h>
int main()
{
    char hex[17];
    long long decimal, place;
    int i = 0, val, len;

    decimal = 0;
    place = 1;

    /* Input hexadecimal number from user */
    printf("Enter any hexadecimal number: ");
    gets(hex);

    /* Find the length of total number of hex digit */
    len = strlen(hex);
    len--;

    /*
    * Iterate over each hex digit
    */
    for(i=0; hex[i]!='\0'; i++)
    {

        /* Find the decimal representation of hex[i] */
        if(hex[i]>='0' && hex[i]<='9')
        {
```

```
        val = hex[i] - 48;
    }
    else if(hex[i]>='a' && hex[i]<='f')
    {
        val = hex[i] - 97 + 10;
    }
    else if(hex[i]>='A' && hex[i]<='F')
    {
        val = hex[i] - 65 + 10;
    }

    decimal += val * pow(16, len);
    len--;
}

printf("Hexadecimal number = %s\n", hex);
printf("Decimal number = %lld", decimal);

return 0;
}
```

```
C:\Users\hemant\Desktop\con > Enter any hexadecimal number: 5f
Hexadecimal number = 5f
Decimal number = 95
=====
Process exited after 4.411 seconds with return value 0
Press any key to continue . . .
```