#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;

}Output