#include<stdio.h>

int binaryproduct(int,int);

int main()

{

long binary1, binary2, multiply =0;

int digit, factor =1;

printf(" enter the first binary number:");

scanf("%d",& binary1);

printf("enter the second binary number:");

scanf("%d",&binary2);

while(binary2 !=0)

{

digit = binary2 % 10;

if(digit ==1)

{

binary1 =binary1 \* factor;

multiply= binaryproduct(binary1,multiply);

}

else

binary1 =binary1 \* factor;

binary2 =binary2 / 10;

factor = 10;

}

printf("product of two binary numbers: %d",multiply);

return 0;

}

int binaryproduct(int binary1, int binary2)

{

int i =0,remainder = 0,sum[20];

int binaryprod = 0;

while (binary1 !=0 || binary2 !=0)

{

sum[i++]=(binary1 % 10 + binary2 % 10 + remainder)% 2;

remainder =(binary1 % 10 + binary2 % 10 + remainder)/2;

binary1 = binary1 / 10;

binary2 = binary2 / 10;

}

if (remainder != 0)

sum[i++]=remainder;

--i;

while (i >=0)

binaryprod = binaryprod \* 10 + sum[i--];

return binaryprod;

}

