#include<stdio.h>

int main()

{

int array\_a1[30], array\_a2[30], array\_a3[30], array\_a4[30], array\_a5[30], array\_a6[30], array\_a7[30], array\_a8[30];

int div, count, j, key, m, plaintext, temp, dec = 0;

printf("\nEnter a Plain-Text value:\t");

scanf("%d", &plaintext);

printf("\nEnter the Key:\t");

scanf("%d", &key);

printf("\nEnter the Bit-Stream\n");

for(count = 0; count < plaintext; count++)

{

scanf("%d", &array\_a1[count]);

}

div = plaintext / 2;

temp = div - key;

for(count = 0; count <= temp; count++)

{

array\_a3[count] = 0;

dec++;

}

dec = dec - 1;

printf("Enter the Key Bit Stream\n");

for(count = 0; count < key; count++)

{

scanf("%d", &array\_a3[dec++]);

}

for(count = 0; count < 2; count++)

{

printf("%d", array\_a8[count]);

}

printf("Left Hand\n");

for(count = 0; count < div; count++)

{

array\_a5[count] = array\_a1[count];

printf("%d", array\_a1[count]);

}

printf("Right Hand\n");

for(count = div; count < plaintext; count++)

{

array\_a2[count] = array\_a1[count];

printf("%d", array\_a1[count]);

}

for(j = 0, m = div; j < dec, m < plaintext; j++, m++)

{

if(array\_a2[m] == 1 && array\_a3[j] == 1)

{

array\_a6[j] = 0;

}

else if(array\_a2[m] == 1 && array\_a3[j] == 0)

{

array\_a6[j] = m;

}

else

{

array\_a6[j] = 0;

}

}

printf("\nFirst XOR\n");

for(count = 0; count < div; count++)

{

printf("%d", array\_a6[count]);

}

for(j = 0, m = 0; j < div, j++; j++, m++)

{

if(array\_a5[m] = 1 && array\_a6[j] == 1)

{

array\_a4[j] = 0;

}

else if(array\_a5[m] = 1 && array\_a6[j] == 0)

{

array\_a4[j] = m;

}

else if(array\_a5[m] == 0 && array\_a6[j] == 1)

{

array\_a4[j] = 0;

}

}

printf("\nSecond XOR\n");

for(count = 0; count < div; count++)

{

printf("%d", array\_a4[j]);

}

return 0;

}