/\*801  
 #include <iostream>  
using namespace std;  
long int swapbyPointer(long int x, long int y){  
 x=\*(&y);  
 return x;  
}  
int main(){  
long int a, b;  
cin>>a>>b;  
cout<<swapbyPointer(a, b)<<" "<<swapbyPointer(b, a);  
  
return 0;}  
\*/  
  
  
  
/\*802  
#include <iostream>  
using namespace std;  
int main() {  
 int a;  
 cin>>a;  
 int arr[100];  
 int \*arr2=arr;  
 for(int i=0;i<a;i++){  
 cin>>arr[i];  
 cout<<arr2[i];  
 }  
 return 0;  
}\*/  
  
  
  
/\*803  
#include <iostream>  
#include <cstring>  
using namespace std;  
const int MAX=20;  
int countAccurance(char arr[MAX], char\* ch){  
int count=0;  
int arrLenght = strlen(arr);  
for(int i=0; i<arrLenght; i++){  
if(arr[i]==\*ch){//count elements  
 count++;  
}}  
return count;}  
  
int main(){  
 int n;  
 cin>>n;  
 char ch1;  
 char str1[MAX];  
for(int i=0;i<n;i++){  
 cin>>ch1>>str1;  
cout<<countAccurance (str1, &ch1)<<" "<<ch1<<" in"<<" "<<str1<<endl;}  
return 0;}  
\*/  
  
  
  
/\*804  
#include <iostream>  
#include <cstring>  
#include <cctype>  
using namespace std;  
int main()  
{  
 char x[100];  
 char \*p=x;  
 cin >>x;  
 for (int i=0; i<strlen(x); i++){  
 if (isalpha(\*(p+i)) >0){  
 cout<< \*(p+i);}  
 }  
}\*/  
  
  
  
/\*806  
#include <iostream>  
using namespace std;  
void inputArr(int\* a, int n){  
 for (int i=0; i < n; i++) {  
 cin >> \*(a + i);  
 }  
}  
void outputODD(int\* a, int n) {  
 for (int i = 0; i < n/2; i++) {  
 cout << \*(a + (2\*i))<<" ";  
 }//odd possition  
}  
void outputEVEN(int\* a, int n) {  
 for (int i = 1; i <= n/2; i++) {  
 cout << \*(a + (2\*i)-1)<<" ";  
 }//even possition  
}  
int main() {  
 int n;  
 cin>>n;  
 int\* arr= new int[n];  
 inputArr(arr,n);  
 outputODD(arr, n);  
 outputEVEN(arr, n);  
 delete[] arr;  
 return 0;}  
\*/  
  
  
  
/\*807  
#include <iostream>  
#include <cstring>  
using namespace std;  
void sumbetwzeroes() {  
 int a;  
 cin >>a;  
 for (int i=0; i<a; i++) {  
 int\* p =new int;  
 cin>> \*p;  
 if (\*p == 0){  
 int sum=0;  
 for (int b=0; b<a; b++){  
 cin>> \*p;  
 sum += \*p;  
 if (\*p==0){  
 cout<<sum<<endl;  
 return;}  
 }  
 }  
 }  
}  
int main() {  
 sumbetwzeroes();  
}\*/  
  
  
  
/\*808  
#include <iostream>  
#include <cmath>  
using namespace std;  
int main() {  
 int\* ptr = new int[100];  
 int n, max= -100, maxNum =0, sum =0;  
 cin>>n;  
 for (int i=0; i<n; i++){  
 cin >> ptr[i];  
 if (ptr[i] >= max){  
 max= ptr[i];  
 maxNum= i;}  
 }  
 for (int i=0; i<maxNum; i++){  
 if (ptr[i] > 0){  
 sum += ptr[i];}  
 }  
 cout<<sum;  
 return 0;  
}\*/  
  
  
  
/\*809  
#include <iostream>  
using namespace std;  
int main()  
{  
 int n;  
 cin>>n;  
 int\* mass = new int[n];  
 for (int i=0; i<n; i++)  
 {  
 cin>>mass[i];  
 }  
 int min =mass[0], minIndex = 0;  
 int max =mass[0], maxIndex = 0;  
 for (int i=1; i<n; i++){  
 if (min> mass[i]){  
 min= mass[i];  
 minIndex= i;  
 }  
 if (max< mass[i]){  
 max= mass[i];  
 maxIndex = i;  
 }  
 }  
 int sum=0;  
 for (int i= minIndex+1; i< maxIndex; i++){  
 if (mass[i] %2 ==0)  
 sum++;  
 }  
 cout<<sum;  
}\*/  
  
  
  
/\*810  
#include <iostream>  
#include <cstring>  
using namespace std;  
void equalityofStrings(string \*first, string\* second) {  
 if(\*first==\*second){  
 cout<<"YES";}  
 else{  
 cout<<"NO";}  
 }  
int main(){  
 string first, second;  
 cin>>first>>second;  
 equalityofStrings(&first, &second);  
 return 0;  
}\*/  
  
  
  
/\*811  
#include <iostream>  
#include <cstring>  
using namespace std;  
int checkPalindrom(string a){  
 int n=a.length();  
 int count=0;  
 for(int i=0; i<n/2; i++){  
 if(a[i]==a[n-i-1]){  
 count++;}  
 }  
 return count;  
}  
int main() {  
string a;  
cin>>a;  
int n=a.length();  
if(checkPalindrom(a)==n/2){  
 cout<<"YES";}  
else{  
 cout<<"NO";}  
return 0;  
}  
\*/  
  
  
/\*812  
#include <iostream>  
#include <cstring>  
using namespace std;  
int main(){  
 char a[26];  
 cin>>a;  
 int n;  
 int\* k= &n;  
 cin>> \*k;  
 for (int i=0; i<strlen(a); i++)  
 if (a[i] >='A' && a[i]<= 91){  
 if (a[i]- \*k >='A'){  
 a[i] = a[i] - \*k;  
 }  
 else{  
 a[i] = a[i] - \*k + 26;  
 }  
 }  
 for (int i=0; i<strlen(a); i++)  
 cout << a[i];  
}\*/  
  
  
  
/\*  
#include <iostream>  
using namespace std;  
int main() {  
 int a,b,c,d;  
 char dots;  
 int \*p1 =&a, \*p2 =&b, \*p3 =&c, \*p4 =&d;  
 cin>>\*p1>>dots>>\*p2>>dots>>\*p3>>dots>>\*p4;  
 if ((\*p1 >= 0 and \*p2 < 256) and (\*p2 >= 0 and \*p2 < 256)  
 and (\*p3 >= 0 and \*p3 < 256) and (\*p4 >= 0 and \*p4 < 256))  
 cout<<"1";  
 else {cout<<"0";}  
}\*/  
  
  
  
  
/\*814  
#include <iostream>  
using namespace std;  
string dir;  
int step;  
int ala(){  
 int ptr1=0, ptr2=0;  
 int\* s;  
 int\* e;  
 while (cin >> dir >> step){  
 if (dir == "North"){  
 ptr1 += step;  
 }  
 if (dir == "East"){  
 ptr2 +=step;  
 }  
 if (dir == "West"){  
 ptr2 -=step;  
 }  
 if (dir == "South"){  
 ptr1 -=step;  
 }  
 if (!cin){  
 break;  
 }  
 }  
 s =&ptr2;  
 e =&ptr1;  
 cout<<\*s<<' '<<\*e;  
}  
int main() {  
 ala();  
}\*/  
  
  
  
/\* 815  
#include <iostream>  
using namespace std;  
 unsigned sumDigits(int n) {// to find sum of digits  
 unsigned sum = 0;  
 while (n != 0) {  
 sum += n % 10;//find sum  
 n /= 10;//for every time change n by deleting last digit  
 }  
  
 return sum;  
}  
int isLuckyTicket(int number) {  
 int firstHalf = number / 10000;//condition for find firsthalf  
 int secondHalf = number % 10000;//condition for find secondhalf  
int count=0;  
 if(sumDigits(firstHalf) == sumDigits(secondHalf)){  
 count++;  
 }  
 return count;  
}  
void countLucky(int a, int b){  
 int n=0;  
 for(int i = a;i<=b;i++)  
 { //find amount of lucky tickets for a certain period  
 if(isLuckyTicket(a)>0)  
 { //if counter in function not zero it is Lucky  
 n++; //counter  
 }  
 a++;  
 }  
 cout << n << endl;  
}  
int main()  
{  
 int x, y;  
 cin >> x >> y;  
countLucky(x,y);  
}\*/