**Задача A**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define pb push\_back

#define INF 1000000007

#define s second

#define f first

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

**using** **namespace** **std**;

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

ll **max**(ll a,ll b){

 **if** (a>b) **return** a;

 **return** b;

}

**void** **solve**(){

 **set**<**int**> sx,sy;

 **vector**<**int**> x,y;

 **int** n;**cin**>>n;

 **for** (**int** i=0; i<n; i++){

 **int** x1,y1;**cin**>>x1>>y1;

 sx.insert(x1);

 sy.insert(y1);

 x.pb(x1);

 y.pb(y1);

 }

 //for (auto c: sx) x.pb(c);

 //for (auto c: sy) y.pb(c);

 **int** lx,ly;

 sort(x.begin(),x.end());

 sort(y.begin(),y.end());

 **if** (x.size()%2==1){

 lx=1;

 } **else** {

 lx=x[x.size()/2]-x[x.size()/2-1]+1;

 }

 **if** (y.size()%2==1){

 ly=1;

 } **else** {

 ly=y[y.size()/2]-y[y.size()/2-1]+1;

 }

 **cout**<<lx\*ly;

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача B**

#include <bits/stdc++.h>

#define int long long

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<"x:"<<x<<endl;

#else

#define debug(x)

#endif

**using** **namespace** **std**;

**void** **solve**(){

 **int** m;**cin**>>m;

 **cout**<<(m+4)/5;

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача C**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<"x:"<<x<<endl;

#else

#define debug(x)

#endif

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

**using** **namespace** **std**;

**void** **solve**(){

 **int** n;

 **cin**>>n;

 **vector**<**int**> **a**(n);

 **for** (**int** i=0; i<n; i++) **cin**>>a[i];

 **vector**<**int**> **dp**(n+1);

 sort(a.begin(),a.end());

 // for (auto c: a) cout<<c<<" ";

 //cout<<endl;

 dp[1]=0;

 dp[2]=a[1]-a[0];

 **for** (**int** i=3; i<=n; i++){

 dp[i]=dp[i-1]+a[i-1]-a[i-2];

 **if** (i>3) dp[i]=min(dp[i],dp[i-2]+a[i-1]-a[i-2]);

 }

 // for (int i=0; i<n; i++) cout<<dp[i+1]<<" ";

 // cout<<endl;

 **cout**<<dp[n];

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача D**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define INF 1000000007

#define s second

#define f first

#define pb push\_back

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

**using** **namespace** **std**;

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

ll **max**(ll a,ll b){

 **if** (a>b) **return** a;

 **return** b;

}

**const** **int** spec\_mod=1000000;

**vector**<**int**> good;

**set**<**int**> **ms\_t**;

**vector**<**vector**<**int**> > gr;

**void** **do\_it**(**int** u){

 **int** z=rand()%2;

 **int** d=gr[u][z];

 **for** (**auto** to: gr[d]){

 **if** (good[to]==1){

 good[to]=0;

 **ms\_t**.insert(to);

 } **else** {

 good[to]=1;

 **ms\_t**.erase(to);

 }

 }

}

**void** **solve**(){

 **int** n,m;

 **cin**>>n>>m;

 good=**vector**<**int**> (n);

 gr=**vector**<**vector**<**int**> > (n+m);

 **for** (**int** i=0; i<n; i++){

 **cin**>>good[i];

 **if** (good[i]==0){

 **ms\_t**.insert(i);

 }

 }

 **for** (**int** i=0; i<m; i++){

 **int** k;**cin**>>k;

 **for** (**int** j=0; j<k; j++){

 **int** v;**cin**>>v;v--;

 gr[v].pb(i+n);

 gr[i+n].pb(v);

 }

 }

 **if** (**ms\_t**.size()==0){

 **cout**<<"WORK";

 **return**;

 }

 **int** cnt=0;

 **while** (cnt<100000){

 **if** (**ms\_t**.size()==0){

 **cout**<<"WORK";

 **exit**(0);

 }

 **int** x=\*(**ms\_t**.begin());

 do\_it(x);

 cnt++;

 }

 **cout**<<"WEEKEND";

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 srand(time(NULL));

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача E**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define pb push\_back

#define INF 1000000007

#define s second

#define f first

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

**using** **namespace** **std**;

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

ll **max**(ll a,ll b){

 **if** (a>b) **return** a;

 **return** b;

}

**const** **int** spec\_mod=1000000;

**void** **solve**(){

 **string** s;

 **cin**>>s;

 **int** k,n=s.size(),pos=0;

 **vector**<**int**> ans;

 **cin**>>k;

 **for** (**int** i=0; i<n-k; i++){

 **for** (**int** j=0; j<10; j++){

 **int** cnt=0,fl=1;

 **for** (**int** l=pos; l<n; l++){

 **int** om=s[l]-48;

 **if** (om==j){

 //fl=1;

 **break**;

 } **else** {

 cnt++;

 }

 **if** (cnt>k) **break**;

 }

 **if** (k-cnt>=0&&fl){

 k -=cnt;

 **for** (**int** l=pos; l<pos+cnt; l++){

 ans.pb(l);

 }

 pos +=cnt+1;

 **break**;

 }

 //debug(cnt);

 }

 debug(pos);

 }

 **int** l=n-1;

 **while** (ans.size()<k){

 ans.pb(l);

 l--;

 }

 sort(ans.begin(),ans.end());

 **for** (**auto** c: ans) **cout**<<c+1<<" ";

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача F**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define INF 1000000007

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

**using** **namespace** **std**;

**const** **int** spec\_mod=1000000;

**void** **solve\_test**(**int** a){

 **int** fl=0;

 **vector**<**int**> **used**(101);

 **int** copy\_a=a,ans1=INF,ans2=0;

 **for** (**int** i=1; i<10000; i++){

 **if** (a>=10) fl=1;

 **int** z1=a%100/10,z2=a%10;

 **int** z=min(z1,z2)\*10+max(z2,z1);

 **if** (used[z]!=0&&fl){

 **if** (used[z]<ans1){

 ans1=used[z];

 ans2=i;

 }

 }

 **if** (fl) used[z]=i;

 a \*=copy\_a;

 a=a%spec\_mod;

 }

 **cout**<<copy\_a<<" ="<<" "<<ans1<<" "<<ans2<<**endl**;

}

**void** **solve\_good**(){

 **int** a,fl=0;

 **cin**>>a;**vector**<**int**> **used**(101);

 **int** copy\_a=a,ans1=INF,ans2=0;

 **for** (**int** i=1; i<10000; i++){

 **if** (a>=10) fl=1;

 **int** z1=a%100/10,z2=a%10;

 **int** z=min(z1,z2)\*10+max(z2,z1);

 **if** (used[z]!=0&&fl){

 **if** (used[z]<ans1){

 ans1=used[z];

 ans2=i;

 } **else** {

 **if** (used[z]==ans1){

 ans1=min(ans1,i);

 }

 }

 }

 **if** (fl) used[z]=i;

 a \*=copy\_a;

 a=a%spec\_mod;

 }

 **cout**<<ans1<<" "<<ans2;

}

**signed** **main**() {

 **int** t=1;

 //for (int i=500; i<=600; i++){

 //solve\_test(i);

 // }

 //cin>>t;

 **while** (t--){

 solve\_good();

 }

 **return** 0;

}

**Задача G**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define INF 1000000007

#define s second

#define f first

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

**using** **namespace** **std**;

**const** **int** spec\_mod=1000000;

**void** **solve**(){

 **map**<**char**,**int**> cnt;

 **string** s;

 **cin**>>s;

 **for** (**int** i=0; i<s.size(); i++){

 cnt[s[i]]++;

 }

 **int** ans=0;

 **for** (**auto** c: cnt){

 **if** (c.s==1) ans++;

 }

 **cout**<<ans;

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}

**Задача H**

#include <bits/stdc++.h>

#define int long long

#define ll long long

#define INF 1000000007

#define s second

#define f first

#ifndef ONLINE\_JUDGE

#define debug(x) cerr<<(#x)<<":"<<x<<endl;

#else

#define debug(x)

#endif

ll **min**(ll a,ll b){

 **if** (a<b) **return** a;

 **return** b;

}

ll **max**(ll a,ll b){

 **if** (a>b) **return** a;

 **return** b;

}

**using** **namespace** **std**;

**const** **int** spec\_mod=1000000;

**void** **solve**(){

 **int** n,m,mx,mn;**cin**>>n>>m;

 **if** (n>m){

 mx=m;

 } **else** {

 mx=n;

 }

 **if** (n<m){

 mn=n;

 } **else** {

 mn=m;

 }

 mn=mn/2+mn%2;

 **cout**<<mn<<" "<<mx;

}

**signed** **main**() {

 **int** t=1;

 //cin>>t;

 **while** (t--){

 solve();

 }

 **return** 0;

}