//code by sonhotrung

//2 dòng này sẽ mất:)))

#include <bits/stdc++.h>

const int maxn=3e4+5;

const int maxm=1e6+5;

const long long oo=1e18;

using namespace std;

int bs;

struct query

{

int L,R,vt;

bool operator <(query&other)const

{

return (make\_pair((L-1)/bs+1,R)<make\_pair((other.L-1)/bs+1,other.R));

}

};

int n,m;

int A[maxn];

query Q[maxm];

int kq[maxm],nho[maxm],cnt=0;

void add(int u)

{

++nho[A[u]];

if (nho[A[u]]==1)

++cnt;

}

void def(int u)

{

--nho[A[u]];

if (nho[A[u]]==0)

--cnt;

}

int main()

{

//freopen("","r",stdin);

//freopen("","w",stdout);

ios\_base::sync\_with\_stdio(false);

cin.tie(0);

cout.tie(0);

cin >> n;

for (int i=1; i<=n; ++i)

cin >> A[i];

bs=sqrt(n);

cin >> m;

for (int i=1; i<=m; ++i)

{

int u,v;

cin >> u >> v;

Q[i]=query{u,v,i};

}

sort(Q+1,Q+1+m);

int L=1,R=0;

for (query q:Q)

{

while (L>q.L)

add(--L);

while (R<q.R)

add(++R);

while (L<q.L)

def(L++);

while (R>q.R)

def(R--);

kq[q.vt]=cnt;

}

for (int i=1;i<=m;++i)

cout << kq[i] <<endl;

return 0;

}