**Divisors Of Factorial**

Given a number, find the total number of divisors of the factorial of the number.

Since the answer can be very large, print answer modulo 10^9+7.

#include<iostream>

#include<cmath>

#include<vector>

using namespace std;

#define N 500001

#define MOD 1000000007

#define pb push\_back

vector<int>\* primesieve(){

int b[N];

for(int i=0;i<N;i++)

{

b[i]=1;

}

for(int i=2;i<=sqrt(N);i++)

{

if(b[i]==1){

for(int j=i\*i;j<=N;j=j+i)

{

b[j]=0;

}

}

}

vector <int>\* prime1 = new vector <int>();

prime1->pb(2);

for(int i=3;i<=N;i+=2)

{

if(b[i]){

prime1->pb(i);

}

}

return prime1;

}

long long factor(int k,vector<int>\* & prime){

long long result=1;

for(int i=0;prime->at(i)<=k;i++){

long long count=0;

int p=prime->at(i);

while((k/p)!=0){

count=(count+(k/p))%MOD;

p=p\*prime->at(i);

}

result=(result\*((count+1)%MOD))%MOD;

}

return result;

}

int main(){

int t;

vector<int>\* prime = primesieve();

cin>>t;

while(t--)

{

int k;

cin>>k;

cout<<factor(k,prime)<<endl;

}

}