Pascal Triangle 1

#include<iostream>

using namespace std;

int main() {

int n;

cin>>n;

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

int num =1;

for(int j=1;j<=n-i+1;j++){

cout<<" ";

}

for(int j=1;j<=i;j++){

if(j==1){

cout<<j<<" ";

}

else{

num=num\*(i-j+1)/(j-1);

cout<<num<<" ";

}

}cout<<endl;

}

}

Pattern Magic

#include<iostream>

using namespace std;

int main() {

int n;

cin>>n;

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

for(int j=i;j<n;j++) {

cout<<"\*";

}

for(int k=1;k<=(2\*i)-1;k++) {

cout<<" ";

}

if(i==0) {

for(int j=i;j<n-1;j++) {

cout<<"\*";

}

}else {

for(int j=i;j<n;j++) {

cout<<"\*";

}

}

cout<<endl;

}

for(int i=n-2;i>=0;i--){

for(int j=i;j<n;j++){

cout<<"\*";

}

for(int k=1;k<=(2\*i)-1;k++){

cout<<" ";

}

if(i==0){

for(int j=i;j<n-1;j++){

cout<<"\*";

}

}

else{

for(int j=i;j<n;j++){

cout<<"\*";

}

}

cout<<endl;

}

return 0;

}

GCD

#include <iostream>

using namespace std;

int gcd(int n1,int n2){

if(n2==0)

return n1;

return gcd(n2,n1%n2);

}

int main() {

int n1,n2,gcd\_num;

cin>>n1;

cin>>n2;

cout<<gcd(n1,n2);

}

IS ARMSTRONG NO

#include<iostream>

using namespace std;

int armstrong(int n){

int t=n,leng=0;

while(t!=0){

leng=leng+1;

t=t/10;

}

int t1=n;

int arm=0;

while(t1!=0){

int mul=1;

int rem=t1%10;

for(int i=1;i<=leng;i++){

mul=mul\*rem;

}

arm=arm+mul;

t1=t1/10;

}

if(arm==n){

cout<<"true";

}

else{

cout<<"false";

}

return arm;

}

int main() {

int n;

cin>>n;

armstrong(n);

}

MILLI'S GALLERY

#include <bits/stdc++.h>

using namespace std;

int main() {

int n;

cin>>n;

vector<int>arr;

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

int x;

cin>>x;

arr.push\_back(x);

}

int total;

cin>>total;

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

if(i-1>=0){

if(arr[i-1] == 1){

continue;

}

}

if(i+1<n){

if(arr[i+1]==1){

continue;

}

}

if(arr[i]==0){

arr[i] = 1;

total--;

}

}

if(total<=0)cout<<"true"<<endl;

else cout<<"false"<<endl;

return 0;

}

FIND PEAK ELEMENT

#include<iostream>

using namespace std;

int main(){

int n;

cin>>n;

int arr[n];

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

{

cin>>arr[i];

}

int ans=-1;

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

{

if((arr[i]>arr[i-1]) && (arr[i]>arr[i+1]))

{

ans=i;

break;

}

}

if(ans==-1){

cout<<"No Peak Element";

}else{

cout<<ans;

}

return 0;

}

THE LOST CITY OF GOLD Z

#include <iostream>

using namespace std;

int main() {

int n,m;

cin>>n;

int arr[n];

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

cin>>arr[i];

}

cin>>m;

int sum=0;double avg,temp;

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

sum+=arr[i];

temp=sum;

}

for(int i=m;i<n;i++){

sum=sum-arr[i-m];

sum=sum+arr[i];

if(sum>temp){

temp=sum;

}

}

avg=temp/m;

cout<<avg<<endl;

return 0;

}