// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int main() {

int t;

cout<<"enter test cases: ";

cin>>t;

while(t--){

int n;

cout<<"enter value: ";

cin>>n;

int s;

s=n\*(n+1)/2;

cout<<s<<endl;

}

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int main() {

int a;

cout<<"enter a number: ";

cin>>a;

int b=2;

bool c=1;

while(c){

if(a%b==0 && b!=a){

cout<<"it is not prime";

break;

}

else{

cout<<"it is prime";

c=0;

}

}

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int main() {

int n;

cout<<"enter the number: ";

cin>>n;

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

if(i%2!=0){

cout<<i<<endl;

}

}

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int main() {

int n;

int s=0;

cout<<"enter the number: ";

cin>>n;

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

if(i%2!=0){

s=s+i;

}

}

cout<<s;

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int main() {

int n;

cout<<"enter the number: ";

cin>>n;

for(int i=1;i<=10;i++){

cout<<n<<"\*"<<i<<"="<<n\*i;

cout<<endl;

}

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int m(int a[],int n){

int b=0;

int c=0;

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

if(c==0)

{

b=a[i];

c=1;

}

else {

if(a[i]==b){

c++;

}

else{

c--;

}

}

}

return b;

}

int main() {

int a[]={3,3,3,4,4,4,4};

int n=sizeof(a)/sizeof(a[0]);

cout<<m(a,n);

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

void trt(int n){

int a[20][20];

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

a[i][0]=1;

a[i][i]=1;

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

a[i][j]=a[i-1][j-1]+a[i-1][j];

}

}

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

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

cout<<a[i][j]<<" ";

}

cout<<endl;

}

}

int main(){

int n=7;

trt(n);

return 0;

}

trt(n);

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

struct node{

int data;

struct node \*next;

struct node \*prev;

};

int main() {

node\*head,\*newnode,\*temp;

head=0;

int c=1;

while(c){

newnode=new node;

cout<<"enter data: ";

cin>>newnode->data;

newnode->next=0;

if(head==0){

head=temp=newnode;

}

else{

temp->next=newnode;

newnode->prev=temp;

temp=newnode;

}

cout<<"enter 0 to stop: ";

cin>>c;

}

temp=head;

temp=temp->next;

temp=temp->prev;

cout<<temp->data;

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

int p(int arr[],int n,int k){

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

if(arr[i]==k){

return i;

}

}

return -1;

}

int main() {

int arr[]={1,4,2,5,76,9};

int k=8;

int n=sizeof(arr)/sizeof(arr[0]);

int o=p(arr,n,k);

if(o!=-1){

cout<<o;

}

else{

cout<<"-1";

}

return 0;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

struct node{

int data;

struct node \*next;

struct node \*prev;

};

int main() {

struct node \*head,\*newnode,\*temp;

head=0;

int c=1;

while(c){

newnode=new node;

cout<<"enter data: ";

cin>>newnode->data;

newnode->next=0;

if(head==0){

head=newnode;

temp=newnode;

}

else{

temp->next=newnode;

newnode->prev=temp;

temp=newnode;

}

temp->next=head;

cout<<"enter 0 to stop: ";

cin>>c;

}

temp=head;

while(temp!=head){

temp=temp->next;

}

temp=temp->next;

temp=temp->prev;

cout<<temp->data;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

struct node{

int data;

struct node \*next;

};

int main() {

struct node \*head,\*newnode,\*temp;

head=0;

int c=1;

while(c){

newnode=new node;

cout<<"enter data: ";

cin>>newnode->data;

newnode->next=0;

if(head==0){

head=newnode;

temp=newnode;

}

else{

temp->next=newnode;

temp=newnode;

}

temp->next=head;

cout<<"enter 0 to stop: ";

cin>>c;

}

temp=head;

while(temp!=head){

temp=temp->next;

}

cout<<temp->data;

}

// Online C++ compiler to run C++ program online

#include <iostream>

using namespace std;

struct node{

int data;

struct node \*next;

};

int main() {

struct node \*head,\*newnode,\*temp,\*prev,\*nxt;

head=0;

int c=1;

while(c){

newnode=new node;

cout<<"enter data: ";

cin>>newnode->data;

newnode->next=0;

if(head==0){

head=newnode;

temp=newnode;

}

else{

temp->next=newnode;

temp=newnode;

}

cout<<"enter 0 to stop: ";

cin>>c;

}

temp=head;

while(temp!=0){

cout<<temp->data<<" ";

temp=temp->next;

}

cout<<endl;

temp=nxt=head;

prev=0;

while(nxt!=0){

nxt=nxt->next;

temp->next=prev;

prev=temp;

temp=nxt;

}

head=prev;

cout<<"after reverse: "<<endl;

temp=head;

while(temp!=0){

cout<<temp->data<<" ";

temp=temp->next;

}

}

#include <iostream>

using namespace std;

struct TreeNode {

int val;

TreeNode \*left;

TreeNode \*right;

TreeNode(int x):val(x),left(nullptr),right(nullptr) {}

};

int sumOfTree(TreeNode\* root) {

if (root == nullptr) {

return 0;

}

return root->val + sumOfTree(root->left) + sumOfTree(root->right);

}

int main() {

TreeNode\* root = new TreeNode(1);

root->left = new TreeNode(2);

root->right = new TreeNode(3);

root->left->left = new TreeNode(4);

root->left->right = new TreeNode(5);

int totalSum = sumOfTree(root);

cout << "Sum : " << totalSum <<endl;

delete root->left->left;

delete root->left->right;

delete root->left;

delete root->right;

delete root;

return 0;

}