5 Diagonal Matrix.

5e. Symmetric Matrix

#include<iostream>

using namespace std;

int main(){

int n;

cout<<"Enter the size of array"<<endl;

cin>>n;

int size=(n\*(n+1))/2;

int a[size];

cout<<"Enter the elements of array"<<endl;

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

cin>>a[i];

}

int b[n][n];

int k=0;

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

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

if(i<=j){

b[i][j]=a[k];

k++;

}

}

}

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

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

if(i>j){

b[i][j]=b[j][i];

}

}

}

cout<<"Symmetric Matrix is as follows"<<endl;

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

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

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

}

cout<<endl;

}

return 0;

}

OUTPUT :

