1. Reverse array

#include <stdio.h>

int main(){

int n,arr[100],rev[100],i;

printf("No. of elements in array:\n");

scanf("%d",&n);

printf("Enter elements of array:\n");

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

scanf("%d",&arr[i]);

}

int j=0;

for(i=n-1;i>=0;i--){

rev[j]=arr[i];

j++;

}

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

printf("%d",rev[i]);

}

}

1. Merge and sort array

#include <stdio.h>

int main(){

int n1,n2,arr1[100],arr2[100],i;

printf("No. of elements in arr1:\n");

scanf("%d",&n1);

printf("Enter elements of arr1:\n");

for(i=0;i<n1;i++){

scanf("%d",&arr1[i]);

}

printf("No. of elements in arr2:\n");

scanf("%d",&n2);

printf("Enter elements of arr2:\n");

for(i=0;i<n2;i++){

scanf("%d",&arr2[i]);

}

int j=0;

for(int i=n1; i<n1+n2; i++){

arr1[i]=arr2[j];

j++;

}

printf("Merged array is\n");

for(int i=0; i<n1+n2;i++){

printf("%d\t", arr1[i]);

}

for(int i=0; i<n1+n2;i++){

int temp;

for(int j=i+1;j<n1+n2;j++){

if(arr1[i]>arr1[j]){

temp=arr1[i];

arr1[i]=arr1[j];

arr1[j]=temp;

}

}

}

printf("\n");

printf("Sorted array is:\n");

for(int i=0; i<n1+n2;i++){

printf("%d\t", arr1[i]); }}

1. Equilibrium index

#include <stdio.h>

int main(){

int n1,arr[100],i,j,flag=1;

printf("No. of elements in arr:\n");

scanf("%d",&n1);

printf("Enter elements of arr:\n");

for(i=0;i<n1;i++){

scanf("%d",&arr[i]);

}

for(i=0; i<n1;i++){

int sumr=0, suml=0;

//right sum

for(int j=i+1;j<n1;j++ ){

sumr=sumr+arr[j];

}

//left sum

for(int j=i-1;j>=0;j-- ){

suml=suml+arr[j];

}

if(sumr==suml){

printf("index %d is equilibrium index with value %d",i, arr[i]);

flag=0;

}

}

if(flag){

printf("No equilibrium index found..");

}

}

1. Missing number

#include <stdio.h>

int main(){

int n,arr[100],i,missing\_num;

printf("No. of elements in arr:\n");

scanf("%d",&n);

printf("Enter elements of arr:\n");

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

scanf("%d",&arr[i]);

}

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

int temp=0;

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

if(arr[i]>arr[j]){

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

}

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

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

missing\_num=arr[i]+1;

printf("missing number is:%d", missing\_num);

}

}

}