Assignment no 15

1. #include<stdio.h>

int greatest(int);

int main(){

int n;

printf("Enter the no of elements : ");

scanf("%d",&n);

printf("%d",greatest(n));

return 0;

}

int greatest(int n){

int i,arr[n],j,great;

printf("Enter the values : \n");

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

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

}

i=0;

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

while(i<j){

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

great=arr[i];

arr[j]=arr[i];

}

i++;

}

}

return(great);

}

2. #include<stdio.h>

int smallest(int);

int main(){

int n;

printf("Enter the no of elements : ");

scanf("%d",&n);

printf("%d",smallest(n));

return 0;

}

int smallest(int n){

int i,arr[n],j,small;

printf("Enter the values : \n");

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

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

}

i=0;

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

while(i<j){

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

small=arr[i];

arr[j]=arr[i];

}

i++;

}

}

return(small);

}

3. #include<stdio.h>

void sort(int);

int main(){

int r;

printf("Enter the range : ");

scanf("%d",&r);

sort(r);

return 0;

}

void sort(int r){

int i,temp,arr[50],j;

printf("Enter the values : ");

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

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

}

for(i=0;i<r-1;i++){

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

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

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

}

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

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

}

}

4. #include<stdio.h>

void rotate(int ary[],int r){

int n,i=r-1,temp,d;

printf("By how any positions you want to rotate : ");

scanf("%d",&n);

printf("Enter the direction 1=left/2=right : ");

scanf("%d",&d);

if(d==1){

while(n){

temp=ary[0];

i=1;

while(i<r){

ary[i-1]=ary[i];

i++;

}

ary[r-1]=temp;

n--;

}

}

else{

while(n){

i=r-1;

temp=ary[r-1];

while(i){

ary[i]=ary[i-1];

i--;

}

ary[0]=temp;

n--;

}

}

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

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

}

}

int main(){

int r,arr[30],i;

printf("Enter the range : ");

scanf("%d",&r);

printf("Enter the values : ");

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

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

}

rotate(arr,r);

return 0;

}

5. #include<stdio.h>

int find(int arr[],int r){

for(int i=0;i<r-1;i++){

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

return arr[i];

}

}

}

int main(){

int r,arr[20];

printf("Enter the range : ");

scanf("%d",&r);

printf("Enter the values : ");

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

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

}

printf("%d",find(arr,r));

return 0;

}

6. #include<stdio.h>

void reverse(int r,int ary[]){

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

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

}

}

int main(){

int r,i,arr[50];

printf("Enter the range of numbers : ");

scanf("%d",&r);

printf("Enter the numbers : ");

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

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

}

reverse(r,arr);

return 0;

}

7. #include<stdio.h>

int find(int r,int ary[]){

int count,i,j,sum=0,temp;

for(j=0;j<r;j++){

count=0;

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

if(ary[j]==ary[i]){

if(temp==ary[j]){

i++;

}

else{

count++;

}

}

}

if(count>1){

temp=ary[j];

}

sum=sum+count;

}

return(sum);

}

int main(){

int i,r,arr[30];

printf("Enter the range of numbers : ");

scanf("%d",&r);

printf("Enter the numbers : ");

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

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

}

printf("%d",find(r,arr));

return 0;

}

8. #include<stdio.h>

void unique(int r){

int j,i,ary[r],count;

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

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

}

for(j=0;j<r;j++){

count=0;

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

if(ary[j]==ary[i]){

++count;

if(count>1)

break;

}

}

if(count==1){

printf("%d ",ary[j]);

}

}

}

int main(){

int r;

printf("Enter the range of numbers : ");

scanf("%d",&r);

printf("Enter the numbers : ");

unique(r);

return 0;

}

9. #include<stdio.h>

void sort(int ary[],int arr[],int ara[]){

int temp,i,j;

for(i=0;i<2;i++){

for(j=0;j<2;j++){

if(ary[i]<ary[j]){

temp=ary[i];

ary[i]=ary[j];

arr[j]=temp;

}

}

}

for(i=0;i<1;i++){

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

temp=arr[i];

arr[i]=arr[i+1];

arr[i+1]=temp;

}

}

for(i=0;i<2;i++){

ara[i]=ary[i];

ara[i+2]=arr[i];

}

for(i=0;i<4;i++){

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

}

}

int main(){

int ary[2]={56,9},arr[2]={26,34},ara[4];

sort(ary,arr,ara);

return 0;

}

10. #include<stdio.h>

void freq(int ary[],int r){

int count,j,i;

for(i=0;i<r-1;i++){

count=0;

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

if(ary[i]==ary[j]){

count++;

}

}

printf("the frequency of %d is %d\n",ary[i],count);

}

}

int main(){

int r,arr[20],i;

printf("Enter the range : ");

scanf("%d",&r);

printf("Enter the numbers : ");

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

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

}

freq(arr,r);

return 0;

}