**ALGOLUTION**

**Q1.Write a program to count total number of negative number in an array.**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int arr[6]={3,6,-3,-7,7,-1};**

**int count=0;**

**for(int i=0;i<6;i++){**

**if(arr[i]<0){**

**count+=1;**

**}**

**}**

**cout<<"The negative element "<<count<<" times present in the array";**

**return 0;**

**}**

**Q2.Write a program that takes 5 integer as input from user and print max of all element.**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int arr[5]={3,6,1,5,2};**

**int max=0;**

**for(int i=0;i<5;i++){**

**if(max<arr[i]){**

**max=arr[i];**

**}**

**}**

**cout<<"The maximum element is "<<max<<" in the array";**

**return 0;**

**}**

**Q3.Write a program to merge two sorted arrays to third array.**

**#include <iostream>**

**using namespace std;**

**void mergeSortedArray(int arr1[],int n,int arr2[],int m,int arr3[]){**

**int k=0,i=0,j=0;**

**while(i<n && j<m){**

**if(arr1[i]<arr2[j]){**

**arr3[k]=arr1[i];**

**i++;**

**k++;**

**}**

**else{**

**arr3[k]=arr2[j];**

**j++;**

**k++;**

**}**

**}**

**while(i<n){**

**arr3[k]=arr1[i];**

**i++;**

**k++;**

**}**

**while(j<m){**

**arr3[k]=arr2[j];**

**j++;**

**k++;**

**}**

**}**

**int main()**

**{**

**int arr1[5]={3,5,6,8,9};**

**int arr2[3]={2,4,7};**

**int arr3[8]={0};**

**mergeSortedArray(arr1,5,arr2,3,arr3);**

**for(int i=0;i<8;i++){**

**cout<<arr3[i]<<" ";**

**}**

**return 0;**

**}**

**Q5.Write a program to find out the order of array is pallindrome or not.**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int arr[5]={1,2,3,2,1};**

**int count=0,i=0,j=5-1;**

**for(int i=0;i<5/2;i++){**

**if(arr[i] != arr[j]){**

**count=1;**

**break;**

**}**

**j--;**

**}**

**if(count==1){**

**cout<<"not pallindrome";**

**}**

**else{**

**cout<<"pallindrome";**

**}**

**return 0;**

**}**

**Q7.Write a program to fine all unique element in array.**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int arr[5]={2,2,3,5,2};**

**for(int i=0;i<5;i++){**

**int count = 0;**

**for(int j=0;j<5;j++){**

**if(arr[j]==arr[i]){**

**count++;**

**}**

**}**

**if(count==1){**

**cout<<arr[i];**

**}**

**}**

**return 0;**

**}**

**Q9.Write a program to find duplicate element in array.**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int arr[6]={1,2,3,2,1,7};**

**for(int i=0;i<6;i++){**

**for(int j=i+1;j<=6;j++){**

**if(arr[i] == arr[j]){**

**cout<<arr[j];**

**}**

**}**

**}**

**return 0;**

**}**

**Q10.Write a program to print following pattern.**

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**#include<iostream>**

**using namespace std;**

**int main(){**

**int n=5;**

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

**for(int j=0;j<n-i-1;++j){**

**cout<<" ";**

**}**

**for(int k=0;k<n;++k){**

**cout<<'\*';**

**}**

**cout<<endl;**

**}**

**return 0;**

**}**

**Q11.Write a program to print following pattern.**

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**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int n=5;**

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

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

**cout<<"\*";**

**}**

**cout<<endl;**

**}**

**return 0;**

**}**

**Q12.Write a program to print following pattern.**

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**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int n=5;**

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

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

**cout<<"\*";**

**}**

**cout<<endl;**

**}**

**for(int i=n-1;i>=1;i--){**

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

**cout<<"\*";**

**}**

**cout<<endl;**

**}**

**return 0;**

**}**

**Q13.Write a program to print following pattern.**

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**#include<iostream>**

**using namespace std;**

**int main(){**

**int row=5;**

**if(row % 2 == 0){**

**cout<<"number of row must be odd"<<endl;**

**return false;**

**}**

**int n = row / 2;**

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

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

**cout<<" ";**

**}**

**for(int j=0;j<2\*i+1;j++){**

**cout<<"\*";**

**}**

**cout<<endl;**

**}**

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

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

**cout<<" ";**

**}**

**for(int j=0;j<2\*i+1;j++){**

**cout<<"\*";**

**}**

**cout<<endl;**

**}**

**}**

**Q14.Write a program to print following pattern.**

**12345**

**54321**

**12345**

**54321**

**12345**

**#include<iostream>**

**using namespace std;**

**int main(){**

**int row=5;**

**int col=5;**

**for(int i=1;i<=row;i++){**

**if(i % 2 != 0){**

**for(int j=1;j<=col;j++){**

**cout<<j;**

**}**

**}**

**else{**

**for(int j=col;j>=1;j--){**

**cout<<j;**

**}**

**}**

**cout<<endl;**

**}**

**}**

**Q15.Write a program to print following pattern.**

**11111**

**10001**

**10001**

**10001**

**11111**

**#include<iostream>**

**using namespace std;**

**int main(){**

**int row=5;**

**int col=5;**

**for(int i=1;i<=row;i++){**

**for(int j=1;j<=col;j++){**

**if(i==1 || i==row || j==1 || j==col){**

**cout<<"1";**

**}**

**else{**

**cout<<"0";**

**}**

**}**

**cout<<endl;**

**}**

**}**