//WAP to input an array of N number of elements and display it

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

    printf("Entered elements of an array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    return 0;

}

//WAP to input an array of N number of elements and display it in reverse order.

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

    printf("Entered elements of an array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    int rev[size];

    for (int i = 0; i < size; i++)

    {

        rev[i]=arr[size-i-1];

    }

    printf("\nArray of an elements after reversing:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",rev[i]);

    }

    return 0;

}

//WAP to input an array of N number of elements and find the sum and average of all the

// elements of that array

#include <stdio.h>

int main()

{

    int size;

    float avg,sum=0;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered Array is:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

        sum+=arr[i];

    }

    avg=sum/size;

    printf("\nThe sum of given array is %f\n",sum);

    printf("The average of given array is %f\n",avg);

    return 0;

}

// WAP to input an array of N number of elements and count total number of positives,

// negatives and zero elements in that array and display those counts

#include <stdio.h>

int main()

{

    int size, count=0, poscount=0, negcount=0;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered elements of an array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

        if (arr[i] < 0)

        {

            negcount++;

        }

        else if (arr[i] > 0)

        {

            poscount++;

        }

        else if (arr[i] == 0)

        {

            count++;

        }

    }

        printf("\nPositive number in an array is %d\n",poscount);

        printf("Negative number in an array is %d\n",negcount);

        printf("Zero in an array is %d times\n",count);

    return 0;

}

// WAP to input an array of Nnumber of elements and store all even numbers in 1 array

// and all oddnumbers in another array.Print both the even and odd array separately

#include <stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    int count = 0;

    for (int i = 0; i < size; i++)

    {

        if (arr[i] % 2 == 0)

            count++;

    }

    int \_count = (size - count);

    int even[count], odd[\_count], k = 0, l = 0;

    for (int i = 0; i < size; i++)

    {

        if ((arr[i] % 2) == 0)

        {

            even[k] = arr[i];

            k++;

        }

        else

        {

            odd[l] = arr[i];

            l++;

        }

    }

    printf("Elements of even array\n");

    for (int k = 0; k < count; k++)

    {

        printf("%d\t", even[k]);

    }

    printf("\nElements of an odd array\n");

    for (int l = 0; l < \_count; l++)

    {

        printf("%d\t", odd[l]);

    }

    return 0;

}

//WAP to input an array of N number of elements and find their standard deviation

#include <stdio.h>

#include<math.h>

int main()

{

    int size;

    float mean,sum=0;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

        sum+=arr[i];

    }

    mean=sum/size;

    float difference,variance,square\_difference,sum\_sq\_diff=0;

    for (int i = 0; i < size; i++)

    {

        difference=(arr[i]-mean);

        square\_difference=pow(difference,2);

        sum\_sq\_diff+=square\_difference;

    }

    variance=sum\_sq\_diff/size;

    float std\_dev;

    std\_dev=sqrt(variance);

    printf("Standard deviation is %f",std\_dev);

    return 0;

}

// Suppose there is president election in US and there are 2 candidates Trump and Biden.

// Input the votes of both the candidates in 10 states of US and calculate state-wise winner

// and over all winner

#include <stdio.h>

int main()

{

    int size;

    printf("Enter the number of state:\n");

    scanf("%d", &size);

    int state\_trump[size], state\_biden[size],i = 1, overall\_sumtrump = 0, overall\_sumbiden = 0, state\_sumbiden = 0, state\_sumtrump = 0;

    while (i <= 10)

    {

        printf("Enter the votes of trump in state %d\n", i);

        scanf("%d",&state\_trump[i]);

        overall\_sumtrump += state\_trump[i];

        printf("Enter the votes of biden in state %d\n", i);

        scanf("%d",&state\_biden[i]);

        overall\_sumbiden += state\_biden[i];

        if (state\_trump[i] > state\_biden[i])

        {

            printf("Trump wins in state %d!!\n", i);

        }

        else if (state\_trump[i] < state\_biden[i])

        {

            printf("Biden wins in state %d!!\n", i);

        }

        else if (state\_trump[i] == state\_biden[i])

        {

            printf("Tieee in state %d!!\n", i);

        }

        i++;

    }

    if (overall\_sumbiden > overall\_sumtrump)

    {

        printf("Overall Biden Wins\n");

    }

    else if (overall\_sumbiden < overall\_sumtrump)

    {

        printf("Overall Trump Wins\n");

    }

    else if (overall\_sumbiden == overall\_sumtrump)

    {

        printf("No one wins both have same votes:-\n");

    }

    return 0;

}

// WAP to read the marks of 500 students of a course in computer programming and print the frequency of each score above 60.Do it using most efficient method you could

// taking minimum memory and minimum

#include <stdio.h>

int main()

{

    int size, count, greater60 = 0;

    printf("Enter the Number of students:\n");

    scanf("%d", &size);

    int arr[size], freq[size];

    printf("Enter the marks of student:-\n");

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered marks of student:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

        if (arr[i] > 60)

        {

            greater60++;

        }

    }

    int large60[greater60 - 1], k = 0;

    for (int i = 0; i < size; i++)

    {

        if (arr[i] > 60)

        {

            large60[k] = arr[i];

            k++;

        }

    }

    printf("\nNumber greater than 60 in the given array is:-\n");

    for (int k = 0; k < greater60; k++)

    {

        printf("%d,", large60[k]);

        freq[k]=-1;

    }

    for (int i = 0; i < size; i++)

    {

        count = 1;

        for (int k = i + 1; k < size; k++)

        {

            if (large60[i] == large60[k])

            {

                count++;

                freq[k] = 0;

            }

        }

        if (freq[i] != 0)

        {

            freq[i] = count;

        }

    }

    printf("\nFrequency of all elements of an array:-\n");

    for (int i = 0; i < greater60; i++)

    {

        if (freq[i]!=0)

        {

            printf("%d occurs %d time\n",large60[i],freq[i]);

        }

    }

    return 0;

}

// WAP to input an array of N number of elements and find the largest element in that array.

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

    scanf("%d",&arr[i]);

    }

    int max=arr[0];

    for (int i = 0; i < size; i++)

    {

        if (arr[i]>max)

        {

            max=arr[i];

        }

    }

    printf("\nThe maximum number in an array is %d",max);

    return 0;

}

//WAP to input an array of N number of elements and find the smallest element in that array

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

    scanf("%d",&arr[i]);

    }

    int min=arr[0];

    for (int i = 0; i < size; i++)

    {

        if (arr[i]<min)

        {

            min=arr[i];

        }

    }

    printf("\nThe minimum number in an array is %d",min);

    return 0;

}

// WAP to input an array of N number of elements and swap the largest and smallest

//  element in that array and print the updated array

#include <stdio.h>

int main()

{

    int size, min, mincount = 0, maxcount = 0;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    int m = 0;

    int copy[size];

    for (int i = 0; i < size; i++)

    {

        copy[m] = arr[i];

        m++;

    }

    printf("Array Before swapping max and min:\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    int max = min = arr[0];

    for (int i = 0; i < size; i++)

    {

        if (arr[i] > max)

        {

            max = arr[i];

        }

        if (arr[i] < min)

        {

            min = arr[i];

        }

    }

    printf("\nMax=%d\nMin=%d\n", max, min);

    for (int i = 0; i < size; i++)

    {

        if (arr[i] == max)

        {

            maxcount++;

        }

        if (arr[i] == min)

        {

            mincount++;

        }

    }

    int maxindex[maxcount], minindex[mincount], k = 0, l = 0;

    for (int i = 0; i < size; i++)

    {

        if (arr[i] == max)

        {

            maxindex[k] = i;

            k++;

        }

        if (arr[i] == min)

        {

            minindex[l] = i;

            l++;

        }

    }

    for (int i = 0; i < size; i++)

    {

        for (int k = 0; k < mincount; k++)

        {

            if (i == minindex[k])

            {

                if (arr[i] == min)

                {

                    arr[i] = max;

                }

            }

        }

        for (int k = 0; k < maxcount; k++)

        {

            if (i == maxindex[k])

            {

                if (arr[i] == max)

                {

                    arr[i] = min;

                }

            }

        }

    }

    printf("Array after swapping max and min:\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    return 0;

}

  // WAP to input an array of N number of elements and find the second smallest element

// and 2nd largest element in that array.

#include <stdio.h>

    int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    int largest1 = arr[0], largest2 = arr[1];

    if (largest1 < largest2)

    {

        int temp = largest1;

        largest1 = largest2;

        largest2 = temp;

    }

    for (int i = 0; i < size; i++)

    {

        if (arr[i] > largest1)

        {

            largest2 = largest1;

            largest1 = arr[i];

        }

        else if ((arr[i] > largest2) && (arr[i] != largest1))

        {

            largest2 = arr[i];

        }

    }

    printf ("The FIRST LARGEST = %d\n", largest1);

    printf ("THE SECOND LARGEST = %d\n", largest2);

    int smallest1 = arr[0], smallest2 = arr[1];

    if (smallest1 > smallest2)

    {

        int temp = smallest1;

        smallest1 = smallest2;

        smallest2 = temp;

    }

    for (int i = 0; i < size; i++)

    {

        if (arr[i] < smallest1)

        {

            smallest2 = smallest1;

            smallest1 = arr[i];

        }

        else if ((arr[i] < smallest2) && (arr[i] != smallest1))

        {

            smallest2 = arr[i];

        }

    }

    printf ("The FIRST SMALLEST = %d\n", smallest1);

    printf ("THE SECOND SMALLEST = %d\n", smallest2);

    return 0;

}

// WAP to input an  array of N number of distinct elements.Input an element you want to

// search and find it.If found then print the position of that element otherwise print not found

#include <stdio.h>

int main()

{

    int size,flag=1;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    int n,k,index[size];

    printf("Enter the number which you want to search:\n");

    scanf("%d",&n);

    for (int i = 0; i < size; i++)

    {

        if (arr[i]==n)

        {

            k=i;

            flag=0;

        }

    }

    if (flag==0)

    {

    printf("%d found at ",n);

        printf("%d,",k+1);

    }

    else

    printf("NOT FOUND\n");

    return 0;

}

// WAP to input an array of N number of elements (Elements can repeat).Input an element

// you want to search and find it.If found then print all the positions of that element otherwise print not found

#include <stdio.h>

int main()

{

    int size,flag=1;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    int n,k=0,index[size];

    printf("Enter the number which you want to search:\n");

    scanf("%d",&n);

    for (int i = 0; i < size; i++)

    {

        if (arr[i]==n)

        {

            index[k]=i;

            k++;

            flag=0;

        }

    }

    if (flag==0)

    {

    printf("%d found at ",n);

    for (int i = 0; i < k; i++)

    {

        printf("%d,",index[i]+1);

    }

    }

    else

    printf("NOT FOUND\n");

    return 0;

}

// WAP to input an array of N number of elements and sort it in ascending order using bubble sort

#include <stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered array is:\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    for (int i = 0; i < size; i++)

    {

        for (int j = 0; j < size-1-i; j++)

        {

        if (arr[j]>arr[j+1])

        {

            int temp=arr[j+1];

            arr[j+1]=arr[j];

            arr[j]=temp;

        }

        }

    }

    printf("\nArray after sorting in ascending order ");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements and sort it in descending order using bubble sort

#include <stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered array is:\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    for (int i = 0; i < size; i++)

    {

        for (int j = 0; j < size-1-i; j++)

        {

        if (arr[j]<arr[j+1])

        {

            int temp=arr[j+1];

            arr[j+1]=arr[j];

            arr[j]=temp;

        }

        }

    }

    printf("\nArray after sorting in descending order ");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements.Input an element you want to insert in that array along with the

//  position and insert it.Print the final array after insertion.

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size+1];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

    printf("Entered elements of an array:-");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    int n,pos;

    printf("\nEnter the number which you want to insert:\n");

    scanf("%d",&n);

    printf("Enter the position on which you want to insert:\n");

    scanf("%d",&pos);

    // int arr[size+1];

    for (int i = size; i >= pos-1; i--)

    {

        arr[i+1]=arr[i];

    }

        arr[pos-1]=n;

    printf("Array after inserting an element:-\n");

    for (int i = 0; i < size+1; i++)

    {

        printf("%d ,",arr[i]);

    }

    return 0;

}

// WAP to  input an array of N number of elements.Input E no.of elements you want to insert in that array along

// with their positions  and insert all of them.Print the final array after insertion of all elements.

#include<stdio.h>

int main()

{

    int size;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size+1];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

    printf("Entered elements of an array:-");

    for (int i = 0; i < size; i++)

    {

        printf("%d,",arr[i]);

    }

    int num,i=0;

    printf("\nHow many number you want to insert:-\n");

    scanf("%d",&num);

    int n,pos;

    while(i<num){

    printf("\nEnter the number which you want to insert:\n");

    scanf("%d",&n);

    printf("Enter the position on which you want to insert:\n");

    scanf("%d",&pos);

    // int arr[size+1];

    for (int i = size; i >= pos-1; i--)

    {

        arr[i+1]=arr[i];

    }

        arr[pos-1]=n;

    printf("Array after inserting an element:-\n");

    for (int i = 0; i < size+1; i++)

    {

        printf("%d ,",arr[i]);

    }

    i++;

    }

    return 0;

}

// WAP to input an array of N number of elements.Input the position of element you want

// to delete.Print the element deleted and updated array after deletion of that element

#include<stdio.h>

int main()

{

    int size,num;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size],delete;

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

        printf("Enter the index of elements which you want to delete:\n");

        scanf("%d",&delete);

        for (int i = delete; i < size; i++)

        {

            arr[i]=arr[i+1];

        }

    printf("Array after deleting:-\n");

    for (int i = 0; i < size-1; i++)

    {

        printf("%d\t",arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements.Input the element you want to delete

// and delete the first occurrence of that element from that array.Print the updated array

#include<stdio.h>

int main()

{

    int size,num;

    printf("Enter the size of an array:\n");

    scanf("%d",&size);

    int arr[size],delete;

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

        printf("Enter the element which you want to delete:\n");

        scanf("%d",&num);

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

        {

            if (arr[i]==num)

            {

                for (int k = i; k <size-1 ; k++)

                {

                    arr[k]=arr[k+1];

                }

            }

        }

    printf("Array after deleting:-\n");

    for (int i = 0; i < size-1; i++)

    {

        printf("%d\t",arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements.Input the element you want to delete

// and delete all occurrence of that element from that array.Print the updated array.

#include <stdio.h>

int main()

{

    int size, num, count = 0;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size], delete;

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Enter the element which you want to delete:\n");

    scanf("%d", &num);

    for (int i = 0; i < size; i++)

    {

        if (arr[i] == num)

        {

            count++;

        }

    }

    for (int i = 0; i < size; i++)

    {

        if (arr[i] == num)

        {

            for (int k = i; k < size - 1; k++)

            {

                arr[k] = arr[k + 1];

            }

        }

    }

    printf("Array after deleting:-\n");

    for (int i = 0; i < size - count; i++)

    {

        printf("%d\t", arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements.Left rotate this array by R number of

// rotations and print the final array.

// Example:-Suppose array is 4 5 3 9 1

// After left rotation by 1 it will be 5 3 9 1 4

#include <stdio.h>

int main()

{

    int size, num, temp;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size], delete;

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Enter the number of rotation:\n");

    scanf("%d", &num);

    for (int k = 0; k < num; k++)

    {

        temp = arr[0];

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

        {

            arr[i] = arr[i + 1];

            arr[size] = temp;

        }

    }

    printf("Array after Rotating:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d\t", arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements.Right rotate this array by R numberof

// rotations and print the final array.

// Example:-Suppose array is 4 5 3 9 1

// After Right rotation by 1 it will be 1 4 5 3 9

#include <stdio.h>

int main()

{

    int size, num, temp;

    printf("Enter the size of an array:\n");

    scanf("%d", &size);

    int arr[size], delete;

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Enter the number of right rotation:\n");

    scanf("%d", &num);

    for (int k = 0; k < num; k++)

    {

        temp = arr[size - 1];

        for (int i = size - 2; i > 0 - 1; i--)

        {

            arr[i + 1] = arr[i];

        }

        arr[0] = temp;

    }

    printf("Array after Rotating:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d\t", arr[i]);

    }

    return 0;

}

// WAP to input an array of N number of elements and find the frequency of an inputted element in that array.

#include <stdio.h>

int main()

{

    int size, num,count = 0;

    printf("Enter the size of an array:-\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered elements of an array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    printf("\nEnter the number for which we have to find frequency:");

    scanf("%d", &num);

    for (int i = 0; i < size; i++)

    {

        if (arr[i] == num)

            count++;

    }

    printf("%d occurs %d times\n", num, count);

    return 0;

}

// WAP to input an array of N number of elements and find the frequency of all elements in that array.

#include <stdio.h>

int main()

{

    int size, count = 0;

    printf("Enter the size of an array:-\n");

    scanf("%d",&size);

    int arr[size], freq[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d",&arr[i]);

    }

    printf("Entered elements of an array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    for (int i = 0; i < size; i++)

    {

        count = 1;

        if(arr[i]!=-1)

        {

        for (int k = i+1; k < size; k++)

        {

            if (arr[i] == arr[k])

            {

                count++;

                arr[k] =-1;

            }

        }

        freq[i]=count;

        }

    }

    for (int i = 0; i < size; i++)

    {

        if (arr[i]!=-1)

        {

            printf("\n%d occurs %d times\n",arr[i],freq[i]);

        }

    }

    return 0;

}

// WAP to input an array of N elements and delete all the elements from that array which are perfect number

#include <stdio.h>

int main()

{

    int size, i, j, k, rem, count = 0;

    printf("Enter the size of an array:-\n");

    scanf("%d", &size);

    int arr[size];

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

    for (i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    for (i = 0; i < size; i++)

    {

        int sum = 0;

        for (k = 1; k < arr[i]; k++)

        {

            rem = arr[i] % k;

            if (rem == 0)

            {

                sum += k;

            }

        }

        if (sum == arr[i])

        {

            count++;

            for (int k = i; k < size; k++)

            {

                arr[k] = arr[k + 1];

            }

        }

    }

    for (int i = 0; i < size - count; i++)

    {

        printf("%d,", arr[i]);

    }

    return 0;

}

// WAP to input an array of Nnumber of elements and delete all the duplicate elements

#include <stdio.h>

int main()

{

    int size, count;

    printf("Enter the size of an array:-\n");

    scanf("%d", &size);

    int arr[size];

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

    for (int i = 0; i < size; i++)

    {

        scanf("%d", &arr[i]);

    }

    printf("Entered elements of an array is :-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    for (int i = 0; i < size; i++)

    {

        count = 0;

        for (int k = i + 1; k < size; k++)

        {

            if (arr[i] == arr[k])

            {

                count++;

                arr[k] = arr[k + 1];

            }

            size = size - count;

        }

    }

    printf("\nUpdated array:-\n");

    for (int i = 0; i < size; i++)

    {

        printf("%d,", arr[i]);

    }

    return 0;

}