Given an array of length 10, write a program to sort the given array in
ascending order
Sample Input:
1 5 6 4 3 2 7 9 8 10
Sample Output:
1 2 3 4 5 6 7 8 9 10

solution:


```c
#include<stdio.h>
int main(){
    int element[10],i,j,temp;
    printf("enter 10 integer numbers:");
    for(i=0;i<10;i++){
        scanf("%d",&element[i]);
    }
    for(i=0;i<10-1;i++){
        for(j=i+1;j<10;j++){
            if(element[i]>element[j]){
                temp=element[i]; //swapping element[i] with element[j]
                element[i]=element[j];
                element[j]=temp;
            }
        }
    }
    printf("Elements are now in ascending order:");
    for(i=0;i<10;i++)
        printf("%d",element[i]);
    return 0;
}
```

###
###
Find the Smallest and Largest Element in an Array

```c
#include<stdio.h>

int main()
{
int a[50],i,n,large,small;
printf("\nEnter the number of elements : ");
scanf("%d",&n);
printf("\nInput the array elements : ");
for(i=0;i<n;++i)
scanf("%d",&a[i]);

large=small=a[0];

for(i=1;i<n;++i)
{
if(a[i]>large)
large=a[i];
```

```c
  if(a[i]<small)
small=a[i];
}

printf("\nThe smallest element is %d\n",small);
printf("\nThe largest element is %d\n",large);

return 0;
}
```

```
###############################################################
##################
Get n numbers from user and print the difference between largest number
and smallest number
```

```c
#include <stdio.h>

int main() {
    int a[10], n;
    int largest1, largest2, i;

    printf("enter number of elements you want in array");
    scanf("%d", &n);
    printf("enter elements");
    for (i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }
    largest1 = a[0];
    for (i = 0; i < n; i++) {
        if (a[i] > largest1) {
            largest1 = a[i];
        }
    }
    largest2 = a[0];
    for (i = 1; i < n; i++) {
        if (a[i] > largest2 && a[i] < largest1)
            largest2 = a[i];
    }
    printf("First and second largest number is %d and %d ", largest1,
largest2);

    printf("difference:");
    printf("%d",largest1-largest2);
}
```

```
###############################################################
##################
```

Get 10 numbers from user and print the difference between largest even number and
largest odd number in given elements

solution:


```c
#include<stdio.h>
int main(){
    int
arr[]={3,7,9,10,18,30,11,24,48,54,68,12,16,4,18,60,32,33,17,29},curr=0,curr1=0;

    int n =sizeof(arr)/sizeof(arr[0]);

    for(int i=0;i<n;i++){
        if(arr[i]%2==0 && arr[i]>curr){
            curr=arr[i];
        }
    }

      for(int i=0;i<n;i++){
        if(arr[i]%2!=0 && arr[i]>curr1){
            curr1=arr[i];
        }
    }

    printf("%d %d diff=%d",curr,curr1,curr-curr1);
    return 0;
}
```


##

Get 10 numbers from user and print the difference between largest even number and
smallest odd number in given elements

```c
#include<stdio.h>
int main(){
    int
arr[]={3,7,9,10,18,30,11,24,48,54,68,12,16,4,18,60,32,33,17,29},curr=0,curr1=0;

    int n =sizeof(arr)/sizeof(arr[0]);

    for(int i=0;i<n;i++){
        if(arr[i]%2==0 && arr[i]>curr){
            curr=arr[i];
        }
    }
    curr1=arr[0];
```

```
        for(int i=0;i<n;i++){
            if(arr[i]%2!=0 && arr[i]<curr1){
                curr1=arr[i];
            }
        }
    }
```

##
########################

Get 10 elements from user and print the diffenece between sum of odd
numbers and sum even

solution:

```
#include <stdio.h>

int main() {
    int arr[10],sum=0,count=0,n;
    printf("enter the num:");
    scanf("%d",&n);
    for(int i=0;i<n;i++){
        scanf("%d",&arr[i]);
    }
     for(int i=0;i<n;i++){
        if(arr[i]%2==0){
            sum =sum+arr[i];
        }
        else{
            count=count+arr[i];
        }
    }

    printf("total_odd:%d total_even:%d=%d",count,sum,count-sum);
}
```


##
###################################