

ARRAYS: Array notation and representation

UNIT-IV

An array is a collection of similar type of elements.

- `int arr[6];`

arr[0]	arr[1]	arr[2]	arr[3]	arr[4]	arr[5]
11	34	4	78	45	16
100	102	104	106	108	110

- `for(i=0;i<6;i++)`
 `scanf("%d",&arr[i]);`
- `for(i=0;i<6;i++)`
 `printf("%d",arr[i]);`

/ WAP to count even and odd element in an array */*

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,arr[5],even=0,odd=0;
    printf("enter the value in array");
    for(i=0;i<5;i++)
        scanf("%d",&arr[i]);
    for(i=0;i<5;i++)
    {
        if(arr[i]%2==0)
            even=even+1;
        else
            odd=odd+1;
    }
    for(i=0;i<5;i++)
        printf("even=%d odd=%d",even,odd);
    getch();
}
```

/* WAP to add elements of an array */

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,arr[5],sum=0;
    printf("enter the value in array");
    for(i=0;i<5;i++)
        scanf("%d",&arr[i]);
        sum=sum+arr[i];
    }
    printf("sum=%d",sum);
    getch();
}
```

`/*program to find minimum and maximum
number in an array */`

```
#include<stdio.h>
#include<conio.h>
void main()
{
int arr[10]={2,5,4,1,8,9,11,6,3,7},i;
int min,max;
min=max=arr[0];
for(i=1;i<10;i++)
{
    if(arr[i]>max)
        max=arr[i];
    if(arr[i]<min)
        min=arr[i]
}
printf("minimum=%d maximum=%d",min,max);
getch();
}
```

`/*WAP to reverse the elements in an array */`

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,arr[10],temp,j;
    for(i=0;i<10;i++)
        scanf("%d",&arr[i]);
    for(i=0,j=9;i<j;i++,j++)
    {
        temp=arr[i];
        arr[i]=arr[j];
        arr[j]=temp;
    }
    printf("reversing the array:");
    for(i=0;i<10;i++)
        printf("%d\t",arr[i]);
    getch();
}
```