ARRAY

INTRODUCTION TO ARRAY

- Array mean collection a data.
- An array is used to store element of the same type.
- There are following types of array.
  - [1]One-Dimensional Array
  - [2] Two-Dimensional Array
  - [3]Multi-Dimensional Array

[1]ONE-DIMENSIONAL ARRAY

```
#include<stdio.h>
#include<conio.h>
void main()
{
        int arr[5],i;
        clrscr();
        printf("\n Enter 5 Values\n");
        for(i=0;i<5;i++)
        {
                printf("\n Enter arr[%d]:= ",i);
                scanf("%d",&arr[i]);
        }
        for(i=0;i<5;i++)
        {
                printf("\n Value of arr[%d]:= ",i);
                printf("%d",arr[i]);
        }
        getch();
}
```

[2]TWO-DIMENSIONAL ARRAY

```
#include<stdio.h>    #include<conio.h>
void main()
{       int arr[2][2],i,j;
        clrscr();
        for(i=0;i<2;i++)
        {
                for(j=0;j<2;j++)
                {
                        printf("\n Enter arr[%d][%d]:= ",i,j);
                        scanf("%d",&arr[i][j]);
                }
        }
        printf("The Entered element are\n");
        for(i=0;i<2;i++)
        {
                for(j=0;j<2;j++)
                {
                    printf("%d\t",arr[i][j]);
                }
                printf("\n");
        }
        getch();
}
```

[3]MULTI-DIMENSIONAL ARRAY

```
#include<stdio.h>       #include<conio.h>
void main()
{       int i,j,k;
        int arr[2][2][2]=
                {               {
                                        {11,22},
                                        {44,55}
                                },
                                {
                                        {33,66},
                                        {77,88}
                                },
                };
        clrscr();
        printf(":::: 3D Array Elements are :::\n");
        for(i=0;i<2;i++)
        {
                for(j=0;j<2;j++)
                {               for(k=0;k<2;k++)
                                {
                                        printf("%d\t",arr[i][j][k]);
                                }printf("\n");
                }printf("\n");
        }getch();
}
```