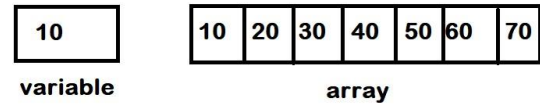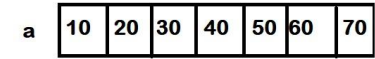# Arrays

variable   array

Array is group of elements which continuously gets stored inside the memory with the same data type
With array name

Creation or Declaration of Arrays
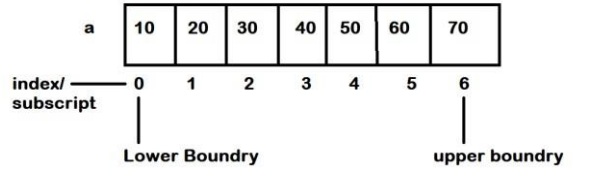
It is as same as normal variable creation but the only difference is to create array, we need mention the size is
n-1 **Syntax:**

Int <array name> [size];

Int a;
Int a [100];

Accessing Array Elements

a[0] = 10
A[1] = 20

We can access the array elements with the help of index value we assign positive index values from "0" The
first index value is called lower boundary and the last index value is called upper boundary.

Reading the Array Elements

We can read array elements with the help of for loop and scanf()

```
Printf("Enter %d Elements:",n);
For(i=0;i<n;i++)
Scanf("%d",&a[i]);
```

Printing the array elements

```
Printf("Array is:%d");
For(i=0;i<n;i++)
Printf("%5d",a[i]);
```

1.WAP to read n elements into an array and print them on screen
Program
```
#include<stdio.h> int
main()
{
    int a[100],n,i;
    printf("Enter Array Size:");
```

```
    scanf("%d",&n);

    printf("Enter %d Elements:",n);
for(i=0;i<n;i++)
scanf("%d",&a[i]);

    printf("Array is:");
for(i=0;i<n;i++)
    printf("%5d",a[i]);




}
```
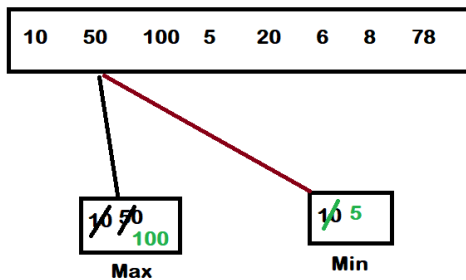
Output

Enter Array Size:5

Enter 5 Elements 10 20 30 40 50

Array is: 10   20   30   40   50

2.WAP to read n element into an array and find the max and min values and print them on screen

10	50	100	5	20	6	8	78

10 50 **100**

Max

10 5

Min

Program
```
#include <stdio.h>
int main()
{
    int a[100],n,i,max,min;
    printf("Enter Array Size:",n);
    scanf("%d",&n);

    printf("Enter %d Elements:",n);
    for(i=0;i<n;i++)
        scanf("%d",&a[i]);

    max=min=a[0];

    for(i=0;i<n;i++){
        if(a[i]>max)
            max=a[i];
        if(a[i]<min)
            min=a[i];
```

```c
    }

    printf("Max=%d",max);
    printf("\nMin=%d",min);
}
```