# ARRAY

```
Enter a no: 15
Enter a no: 7
Enter a no: 24
.
.
15
7
24
.
.
```

Syntax:

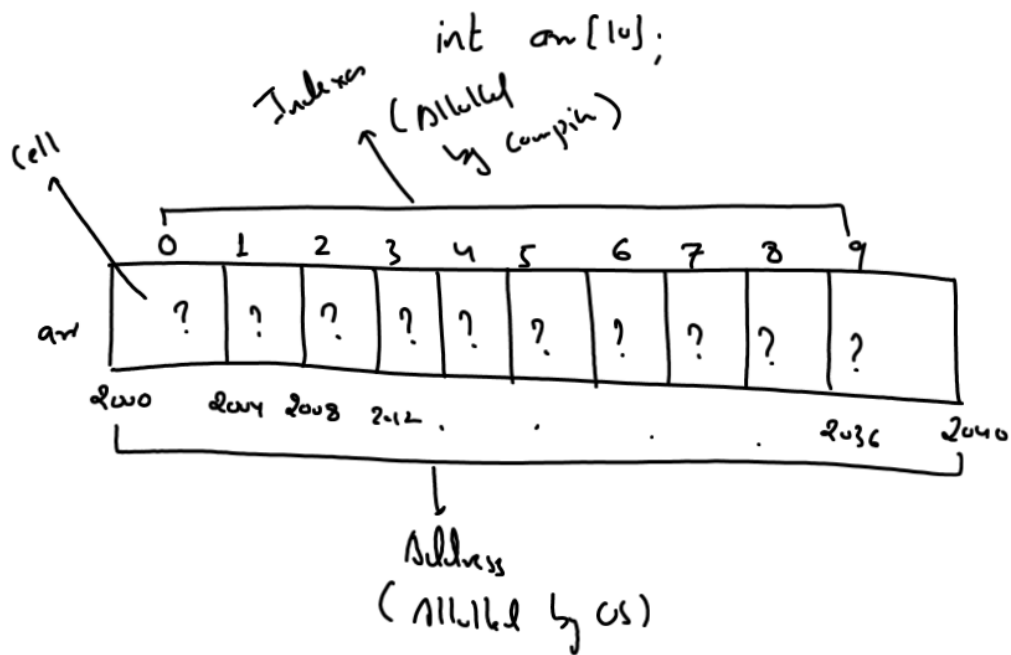$$<data\ type>\ \ <array-name>[\ size\ ];$$

No of values array can
store!

ex:

int roll [10];

char grade [5];

float per [20];

# Single Dimensional Integer Array

int arr [10];

Index
(Allotted
by compiler)

Cell

arr

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| ? | ? | ? | ? | ? | ? | ? | ? | ? | ? |

2000  2004  2008  2012  .  .  .  .  2036  2040

Address
(Allotted by OS)

---

# Accessing Array Values

int arr [10];

< array-name> [ index-no] = value;

arr

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 25 | 40 | | | | | | | | |

6000  6004  .  .  .  .  .  .  .  6040
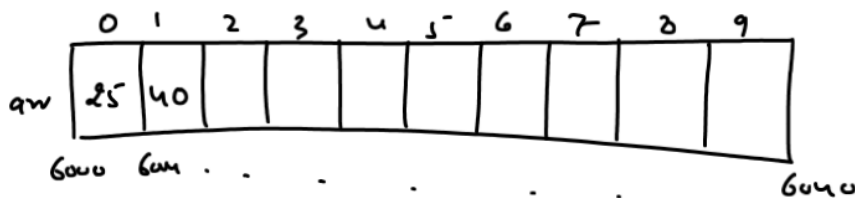
X arr=25;

✓ arr[0]=25;

arr [1] = 40;

:
:

printf (" %d ", arr (0));
      └→ 25

printf (" %d", arr[1]);
      └→ 40

WAP to create an integer array of size 10 , accept values from the user in it and display all the array values

Enter a no: (15)
Enter a no: 8
Enter a no: 45
Enter a no: 26
,,,
Enter a no: 75
You inputted: ✓
15
8
45
26
...
75

```
int main()
{
✓   int arr[10],i;  19
    for(i=0;i<=9;i++)
    {
✓       printf("Enter a no:");
✓       scanf("%d",&arr[i]);
    }
    printf("You inputted:");
                19
    for(i=0;i<=9;i++)
        printf("\n%d",arr[i]);
    return 0;
}
```

Unpredictable

arr

| 0 | 15 | → 2uu |
| 1 | 8 | → 2uy |
| 2 | 45 | → 2uz |
| 3 | 26 | → 2012 |
| 4 | 19 | → 2016 |
| 5 | 24 | → 2020 |
| 6 | 71 | → 2024 |
| 7 | 92 | → 2027 |
| 8 | 40 | → 2032 |
| 9 | 75 | → 2036 |

'/s'