

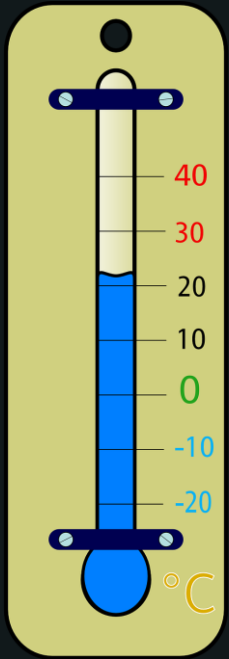
C++ Arrays

C++ Programming

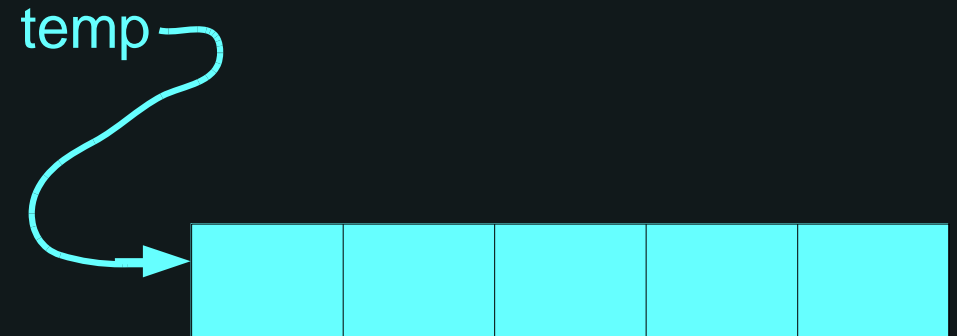


Why Array ?

Arrays are used to store **multiple values** in a **single variable**, instead of **declaring separate variables** for each value.



```
void main( )  
{  
    float temp1= 25.3f;  
    float temp2 = 26.1f;  
    float temp3 = 27.8f;  
    float temp4 = 32.2f;  
    float temp5 = 33.5f;  
}
```



What is Array ?

It is a **collection** of items **stored at contiguous** memory locations.



How to **access elements** in array

?

temp

A light blue curved arrow originates from the word 'temp' and points to the first element of the array, 25.3.

25.3	26.1	27.8	32.2	33.5
0	1	2	3	4

index

temp[0]

temp[1]

temp[3]

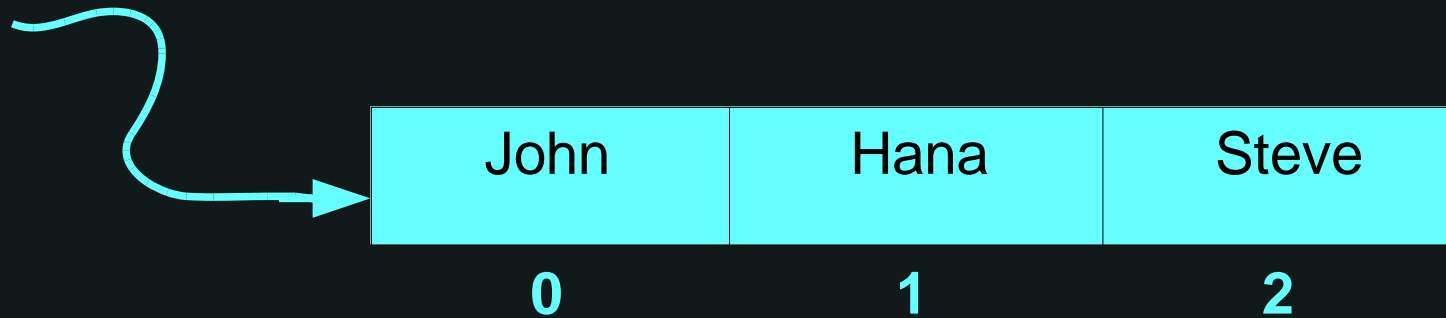
temp[5]

Creating Array

#initialization

```
string name[3] = { "John" , "Hana" , "Steve" };
```

name



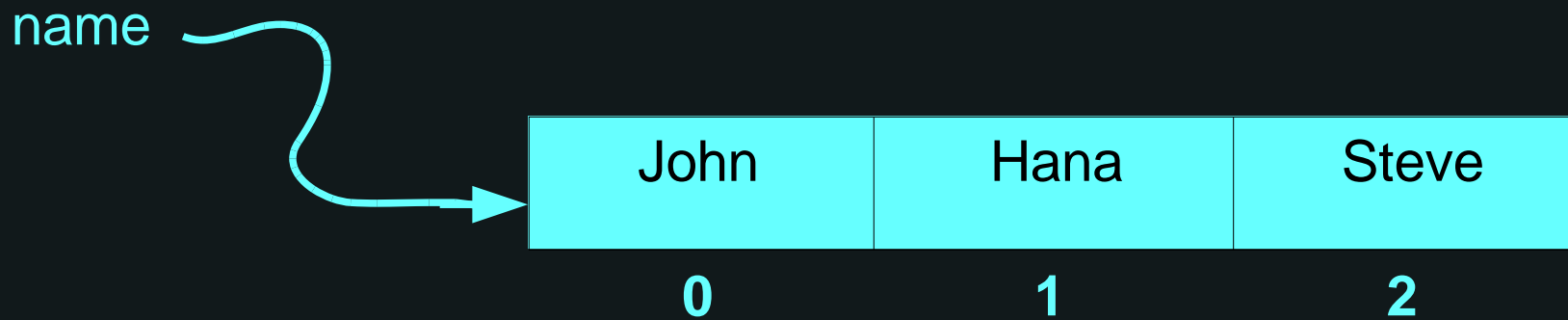
#traversal

```
for ( int i = 0; i < 3 ; i ++ )  
{  
    cout << name[i] ;  
}
```

Creating Array

#initialization

```
string name[3] = { "John" , "Hana" , "Steve" };
```



```
name[1] = "Babita";  
for ( int i = 0; i < 3 ; i ++ )  
{  
    cout << name[i] ;  
}
```

#changing
#traversal

Program

Write a program, to take 5 no. as input and find the minimum no.

Advantage & Disadvantage

Advantage :-

Randomly access the element using index.

Use less line of code

Easy traversal using single loop

Disadvantage :-

Size is fixed, can't change at runtime

Insertion and deletion are costly

