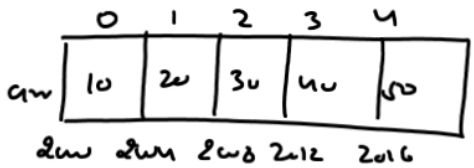
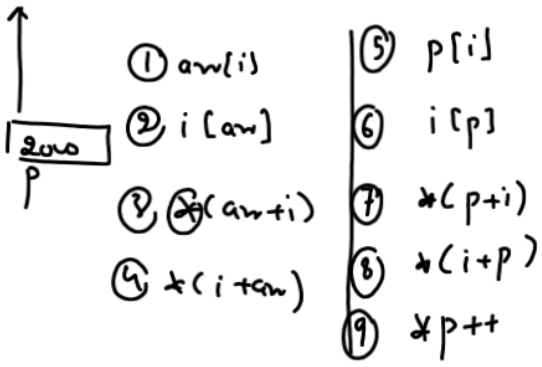
Different Ways Of Accessing Array values

① [ ]
② *

```
int arr[5] = {10, 20, 30, 40, 50};
int *p, i;
p = arr;
for(i=0; i<5; i++)
    printf("%d", ? );
```

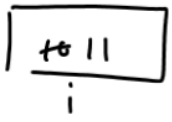




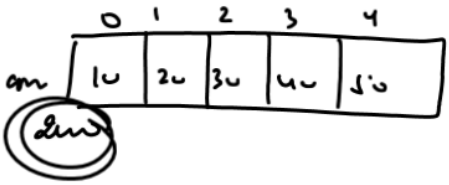

```
int arr[5];
int i;

for(i=0; i<5; i++)
{
    printf("Enter no:");
    scanf("%d", arr+i);
}

for(i=0; i<5; i++)
    printf("%d", *(arr+i));
```

```
int arr[5];
int i, *p;

p = arr;

for(i=0; i<5; i++)
{
    printf("Enter no:");
    scanf("%d", arr);
    arr++;   // L-value required
}
```

```
int i = 10;

i++;
  └> i = i+1;
```




```
int arr[5] = {10, 20, 30, 40, 50};
```




```
arr++;
  └> arr = arr+1;
```

X arr = &arr

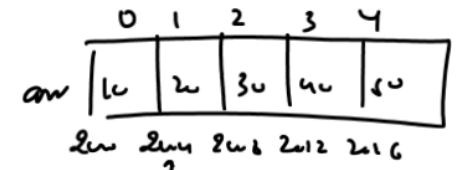
```
int a = 10;

✓ a = 20;

X &a = a;
```

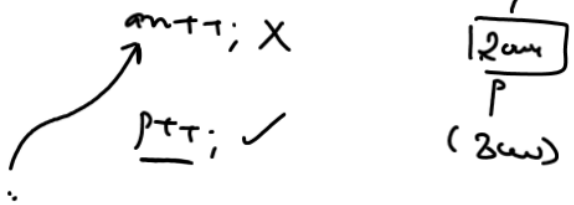
(l-value req'd)

```
int x = 10, y = 20, z;

✓ z = x+y;

X x+y = z;
```

(l-value req'd)

```
int arr[5] = {10, 20, 30, 40, 50};
int *p;
p = arr;
```





What is an array for compiler?

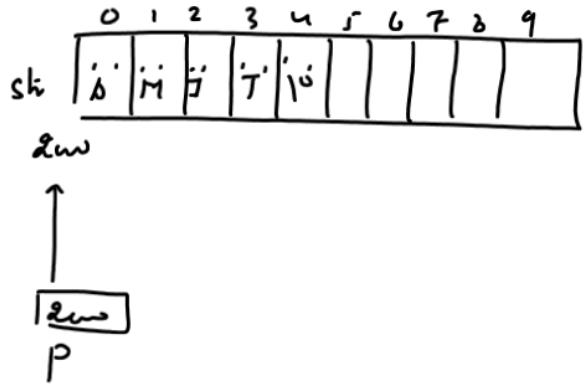
For compiler an array is a CONSTANT POINTER

Because unlike a pointer we cannot increment an array

Because like pointer an array name also gives addr

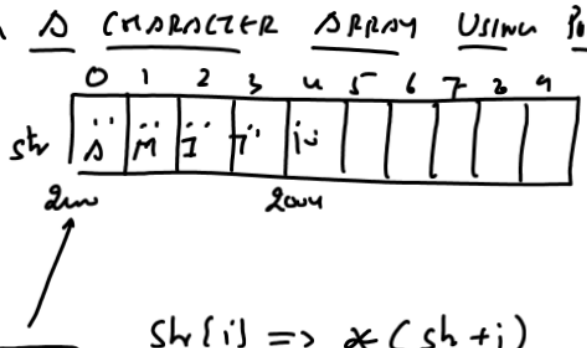
Accessing Character Array Using Pointer

```
int main()
{
  char str[10];
  char *p;
  p=str;
  printf("enter name:");
  scanf("%s",p);
  printf("Hello %s",p);
  return 0;
}
```



TRAVERSING A CHARACTER ARRAY USING POINTER

```
int main()
{
  char str[10];
  char *p;
  int i;
  p=str;
  printf("enter name:");
  scanf("%s",p);
  for(i=0; *(p+i)!='\0';i++)
        printf("\n%c",*(p+i));
  return 0;
}
```



sh[i] => *(sh+i)

or

*(p+i)

A
M
I
T