

(104)

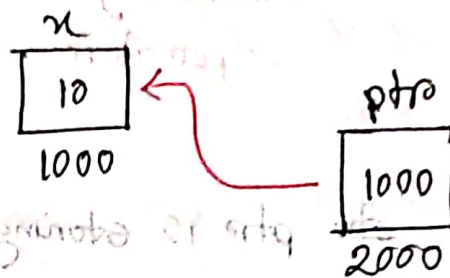
## Value of Operators in Pointers

Value of operators / indirection operator / dereference operator is an operator that is used to access the value at the location pointed by the pointer. (\*)

```
int x = 10;
```

```
int *ptr = &x;
```

```
printf("%d", *ptr);
```



Value of Operator  
Dereference  $x$

It goes to the object address of object and take what is stored in the object.

Output = 10

```
int x = 10;
```

```
int *ptr = &x;
```

\*ptr = 4;

go to the address of  $x$  (1000)  
change the value to (4)

## # Important points to remember :

→ Never apply the indirection operator (\*) to the uninitialized pointer.

```
int *ptr;  
printf("%d", *ptr);
```

pointer must point to some object or variable. But here no object is found. So,

ERROR will occur.

→ Assigning value to an uninitialized pointer is ~~the~~ dangerous.

```
int *ptr;
```

```
*ptr = 1;
```

try to read or write illegal memory location.

This pointer doesn't point to any variable thus it will try to point any memory, But sometimes the memory location may be unauthorized for users. So,

(SEGMENTATION FAULT) ERROR occurs.