

RED & WHITE[®]

Multimedia Education

Shaping "skills" for "scaling" higher...!!!

WELCOME, PROGRAMMERS



01.

What is Pointer of Array?

WHAT IS POINTER OF ARRAY?



POINTER OF ARRAY

Pointer of Array or **Array of Pointer** means we have to create an array of multiple pointers.

Each pointer have allocated memory addresses of array or string elements separately.

Using this concept, we don't have to use scale of pointer to access the array elements.



Example of Array of Pointer

```
int a[5] = {5, 8, 4, 1, 9};  
int *ptr[5], i;  
  
for(i=0; i<=4; i++)  
{  
    ptr[i] = &a[i];  
}
```

02.

What is Chain of Pointer?

WHAT IS CHAIN OF POINTER?



CHAIN OF POINTER

A **pointer to a pointer** is a concept where a **pointer variable** holds the address of another pointer variable.

This creates a **chain of indirection**.

Chain of Pointer is also known as **Pointer to Pointer**.



Example of Pointer to Pointer

```
int a = 5;  
  
int *p1 = &a;  
  
int **p2 = &p1;  
  
printf("%d", *p1); // 5  
printf("%d", **p2); // 5
```



03.

What is Pointer with UDF?

WHAT IS POINTER WITH UDF?



POINTER WITH UDF

To **pass a value** to the **UDF** is a common scenario, known as “**Call by Value**”.

But we can also **pass an address** to the **UDF**, known as “**Call by Reference**”.

While, to receive an address in function definition we must have to declare a parameter as a Pointer.



Example of Pointer with UDF (call by reference)

```
int sum(int *p, int *q)
{
    return *p + *q;
}

void main()
{
    int a = 5, b = 2;
    printf("%d", sum(&a, &b));
}
```



LANGUAGE

Let's start now...

