

# Position of an Array, array and pointers and pointers to a function

## Task 1

```
/* Case 1 */
int (*a)[10];

/* Case 2 */
int *a;
int arr[10];
a = arr;
```

Compare Case 1 and 2 and what will happen when we increment the pointer variable in the cases. Explain the result.

## Task 2

1. Write a program to create an array of pointers.  
First create n variables. Store the address of n variables in the array.
2. Using the array of pointers find the address of the variable with the highest variable.

## Task 3

```
int (*a)(int , int);

int sum(int a, int b){
    c = a+b;
    return c;
}

int main{
    a = sum;
    int d = a(10,20);

    return 0;
}
```

a is a pointer to a function. And we assign the function sum() to this pointer.

1. Using "Call by Reference" and pointer to a function to call, swap two numbers.