Logic-LA-12

Lab Assignment-12

The logic we use to sort the array elements in ascending order

```
for (i = 0; i < n; ++i)
{
for (j = i + 1; j < n; ++j)
{
if (num[i] > num[j])
{
 a = num[i];
num[i] = num[j];
num[j] = a;
}
}
}
```

Logic to Print all unique elements of an array.

```
for (int i = 0; i < size; i++) {
    int count = 0;  // Set count to 0
    for (int j = 0; j < size; j++) {
        if (arr[i] == arr[j]) {
            count = count + 1;  // Increment count by 1
        }
    }

    // Check if the element appears only once
    if (count == 1) {
        printf("%d ", arr[i]);  // Print the unique element
    }
}
```

Logic to reverse the array elements.

```
int length = sizeof(arr)/sizeof(arr[0]);
for (int i = length-1,j=0; i >= 0,j<=length-1; i--,j++)
    {
       b[j]=a[i]
    }
```

Logic to reverse the elements of an array without using another array.

```
int array[] = {1, 2, 3, 4, 5};
  int temp, length = 5;

  int i=0;        //for pointing 1st element of the array
  int j=length-1;  //for pointing last element of the array
while(i<j){
    //swap
    temp = array[i];
    array[i] = array[j];
    array[j] = temp;

    //update i and j
    i++;
    j--;
  }
```