

# ASSIGNMENT ANSWERS 1

## #QUESTION 1

```
public class Main{
    public static void main(String[] args){
        int nums[] = {-2,7,11,5,2};
        int target = 9;

        int output[] = new int[2];
        for(int i=0; i<nums.length; i++){
            for(int j=i+1; j<nums.length; j++){
                if((nums[i]+nums[j])==target){
                    output[0] = i;
                    output[1] = j;
                    break;
                }
            }
        }
        System.out.println(output[0]+" "+output[1]);
    }
}
```

## #QUESTION 2

```
public class Main{
    public static void main(String[] args){
        int ar[] = {3,2,2,3};
        int target = 3;
        int n = remov(ar, target);
        System.out.println(n);
        for(int i=0; i<ar.length; i++){
            System.out.print(" "+ar[i]);
        }
    }
    public static int remov(int ar[], int target){
        int c=0;
        for(int i=0; i<ar.length; i++){
            if(ar[i] == target){
                shift(ar, i, ar.length-1-c);
                ar[ar.length-1-c]=0;
                c++;
            }
        }
        return c;
    }
    public static void shift(int ar[],int from, int till){
```

```

        for(int i=from; i<till; i++){
            ar[i] = ar[i+1];
        }
    }
}

```

### #QUESTION 3

```

def searchInsert(nums, target):
    start = 0
    end = len(nums) - 1

    while start <= end:
        mid = (start + end) // 2

        if nums[mid] == target:
            return mid
        elif target < nums[mid]:
            end = mid - 1
        else:
            start = mid + 1

    return start
nums = [1, 3, 5, 6]
target = 5
print(searchInsert(nums, target))

```

### #QUESTION 4

```

public class Main{
    public static void main(String[] args){
        int ar[] = {1,2,3,4};
        ar[ar.length-1]=ar[ar.length-1]+1;
        for(int i=0; i<ar.length; i++){
            System.out.print(ar[i]+" ");
        }
    }
}

```

### #QUESTION 5

```

public class Main {
    public static int[] merge(int[] nums1, int m, int[] nums2, int n) {
        int i = m - 1;
        int j = n - 1;
        int k = m + n - 1;
    }
}

```

```

while (i >= 0 && j >= 0) {
    if (nums1[i] > nums2[j]) {
        nums1[k] = nums1[i];
        i--;
    } else {
        nums1[k] = nums2[j];
        j--;
    }
    k--;
}
while (j >= 0) {
    nums1[k] = nums2[j];
    j--;
    k--;
}

return nums1;
}

public static void main(String[] args) {
    int[] nums1 = {1, 3, 5, 0, 0, 0};
    int m = 3;
    int[] nums2 = {2, 4, 6};
    int n = 3;

    int[] merge = merge(nums1, m, nums2, n);

    for(int i=0; i<merge.length; i++) {
        System.out.print(merge[i]+" ");
    }
}
}

```

```

#QUESTION 6
nums = [1,2,3,1]
n1 = list(set(nums))
n1 = len(n1)
n2 = len(nums)

print((n1!=n2))

```

```

#QUESTION 7
public class Main{

```

```

public static void main(String[] args){
    int ar[] = {0,1,2,0,3,1,0,0,3,9};
    int l = 0;
    for(int i=0; i<ar.length; i++){
        if(ar[i]!=0){
            ar[l] = ar[i];
            l++;
        }
    }
    while(l<ar.length){
        ar[l]=0;
        l++;
    }
    for(int i=0; i<ar.length; i++){
        System.out.print(ar[i]+" ");
    }
}
}

```

#### #QUESTION 8

```

public class Main{
    public static void main(String[] args){
        int ar[] = {1,2,2,4};
        for(int i=0; i<ar.length-1; i++){
            if(ar[i]==ar[i+1]){
                System.out.println(ar[i]+" "+(ar[i]+1));
                break;
            }
        }
    }
}
}

```