ASSIGNMENT ANSWERS 1

#QUESTION 1

```java
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];
}
```

```
}

}
```

```python
#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]+" ");
}
}
}
```

```java
#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;
```

```java
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]+" ");

}

}

}
```

```python
#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

```java
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;
}
}
}
}
```