CSE220 Practice Sheet 1

1. Given an array of integers and a number, find out if there is any pair whose summation is equal to the number given.

Sample Input	Sample Output
{1,5,9,2,6,8}, 16	False
{1,5,9,2,6,8}, 15	True → Pair (9,6)
{10,3,19,2,45,81,55}, 100	True → Pair (19,81)

```
/*
*@param a is the number of integers
*@param sum is the summation of the pair if found
*@returns true if found otherwise returns false
*/
public boolean pairSumFound (int []a, int sum){
      //TO DO
}
```

OR

```
def pairSumFound(a, sum):
    pass
```

2. Given an array of positive and negative numbers, rearrange the numbers in such way that positive number followed the negative and vice versa. [Assume that there will be always equal number of positive and negative numbers. Note: you are not allowed to use any additional array].

Sample Input	Sample Output
{1,-5,-9,2,-6,8}	{1,-5,2,-9,8,-6}
{-1,-5,9,-2,6,8}	{9,-1,6,-5,8,-2}

```
/*
*@param a is the number of integers
*/
public void alternateArray (int []a){
      //TO DO

}
```

OR

```
def alternateArray (a):
     pass
```

3. Given an array on integers, update each element of by the square of the next element and the last element will be updated by its previous number square value. [Note: you are not allowed to use any additional array].

Sample Input	Sample Output
{1,2,3,4,5,6}	{4,9,16,25,36,25}
{5,9,1,8,2,4,6,3,5}	{81,1,64,4,16,36,9,25,9}

```
/*
*@param a is the number of integers
*/
public void squareArray (int []a){
      //TO DO

}
```

OR

```
def squareArray (a):
      pass
```