

שאלה 1:

```
public static boolean diffValues(int[] a, int n) {
    boolean res = true;
    for(int i=0; i<a.length && res; i=i+1) {
        res = (a[i] >= 1 && a[i] <= n);
        for(int j=i+1; j<a.length && res; j=j+1)
            res = a[i]!=a[j];
    }
    return res;
}
```

שאלה 2:

```
public static void primeFactors(int n) {
    int i=2;
    while(1 < n) {
        if(n % i == 0) {
            System.out.print(i+" ");
            while(n % i == 0) {
                n = n / i;
            }
        }
        i = i + 1;
    }
    System.out.println();
}
```

שאלה 3:

```
public static boolean matches(int n) {
    boolean ans ;
    ans = (n>=1 && n <=3) || !matches(n-3) ||
           !matches(n-2) || !matches(n-1);
    
    
    
    
    
    
    
    
    return ans;
}
```

שאלה 4:

```
public static boolean rec(int[] a, int value){
    return rec(a.length-1, a, value);
}

public static boolean rec(int i, int[] a, int value){
    boolean answer ;
    if(i==0)
        answer = (a[0]==value);
    else
        answer = rec(i-1, a, value - a[i]) ||
                 rec(i-1, a, value + a[i]);
    
    
    
    
    return answer;
}
```