Exercise 1

for (int i = 1; i <= n; i++) {

      for(int j = 1; j <= n; j++) {

        System.out.println("Hey - I'm busy looking at: " + i + " and " + j);

  }

}

Exercise 2

O(n)^2

First loop is O(n)

Second loop is O(n)

So overall is O(n)^2

Exercise 3

O(n)

Exercise 4

Target = 73

1st i :

Middle # : 55

73> 55 so shrink left boundary  l = (14,15,24). RIght boundary stays same r = (59,73,90,94,99)

2nd i:

Middle # = 59

73 >59 so shrink left boundary  l = (15,24). RIght boundary stays same r = (73,90,94,99)

3rd i:

Middle # = 73

73 = 73 so stop search.

Exercise 5:

(1,29,14,15,94)

1st i:

(1,29,14,15,94)

2nd i:

(1,14,29,15,94)

3rd i:

(1,14,15,29,94)