**Problem 2**

//the method take in a list

public static int longestSortedSequence (list)

{

//makes a counter and sets it to 1

int count = 1;

//if the list is empty it will return 0

if (list.size() == 0)

return 0;

else

//for loop to go through the list starting at one

for (int I =1; i <list.size(); i ++)

{

//everytime the number before I is smaller than I count ++ and when it is not it turns it back to 1

for( i > list[i – 1]}

{

count ++;

}

Else (count = 1;)

Return count ;

}

3.

**Problem 4.**

//takes in a list

public boolean isPairWiseSorted()

{

// starts at int I and goes up by 2

for( int i = 1 ; i < (list.size()-2; i +2)

for( int j = list[ i -1]; j +2)

If (j !< i)

{

Return false;

}

return true

}

8. public static Boolean isPalindrome

{