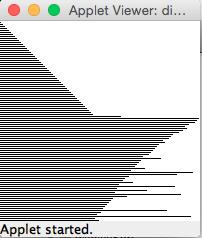
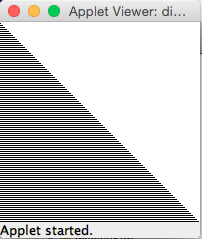
**DOCUMENTATION**

Name: Krithivas Swaminathan

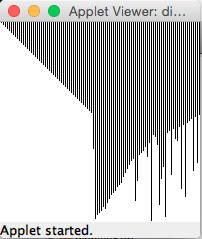
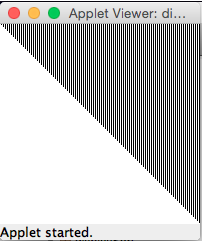
Email:ks583@njit.edu

OUTPUT

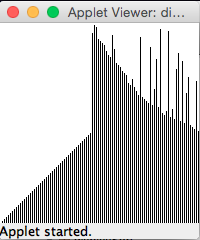
**Horizontal Sort Display After Completion**

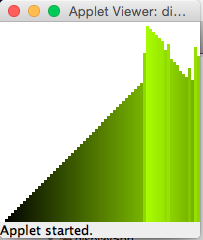
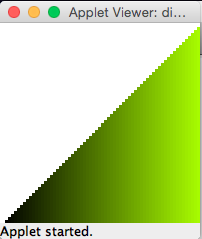
**Vertical Sort Display After Completion**

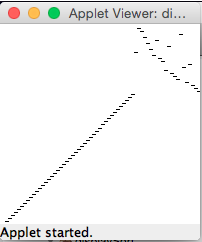
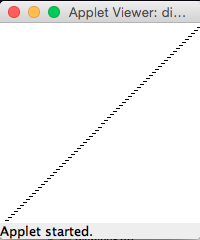
**Base Sort Display After Completion**

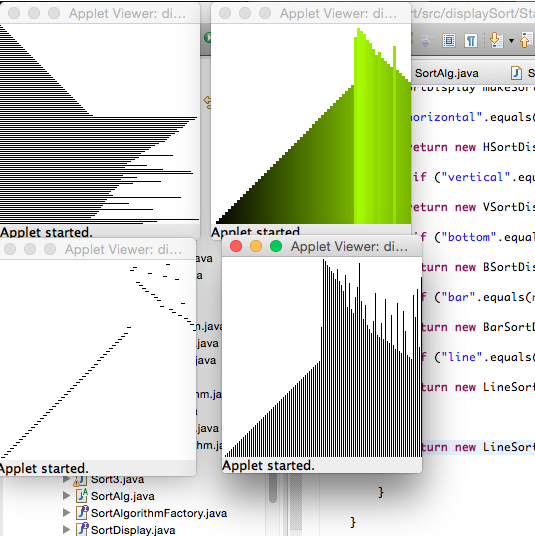
**Bar Sort Display After Completion**

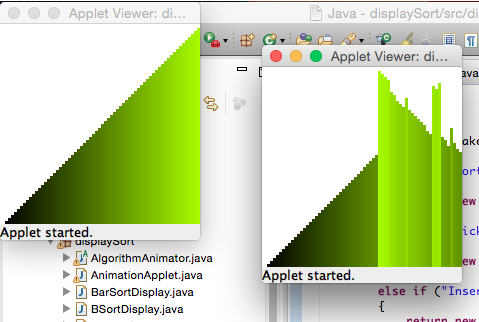
**Line Sort Display After Completion**

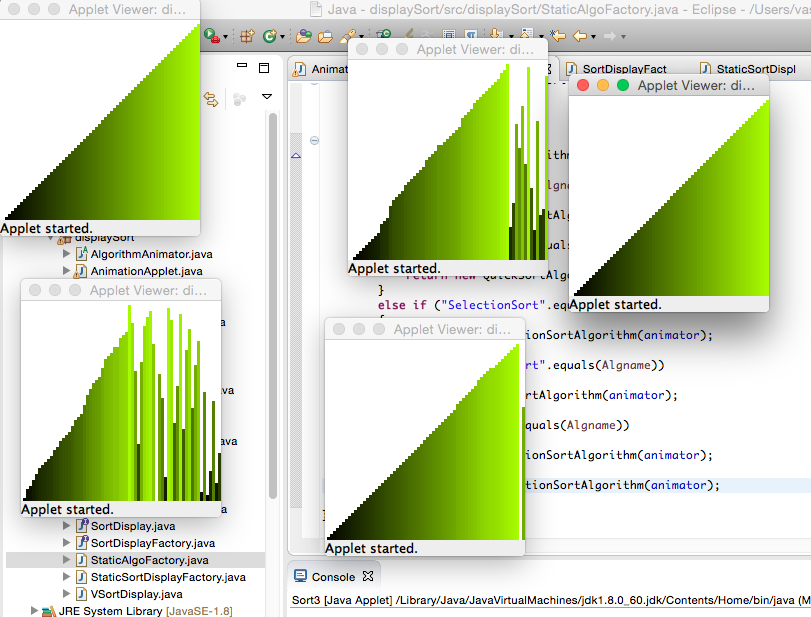
**Running all the Display Strategies simultaneously**



**Running Quick Sort (Left) and Insertion Sort (Right) Simultaneously to compare the speed**



**Running all Algorithms Simultaneously to compare Speed**

****

**Communication Diagram**

SelectionSortAlgorithm

BubbleSortAlgorithm

HeapSortAlgorithm

QuickSortAlgorithm

InsertionSortAlgorithm

BarsortDisplay

VsortDisplay

BsortDisplay

LinesortDisplay

HsortDisplay

theAlgorithm.sort(arr)

Animator

**SortAlg**

Inherits

AlgorithmAnimator

Inherits

**Sort2**

displayFactory

Implements Interface

theDisplay

SortDisplayFactory (Interface)

Inherits

SortDisplay

**Sort3**

Creates

StaticSortDisplayFactory

Inherits

algorithmFactory

SortAlgorithmFactory(Interface)

**makeSortAlgorithm()**

Implements Interface

Creates

StaticAlgoFactory