**CS220 – Lesson 6 – Selection and Insertion Sort Worksheet**

1. Show the first 6 passes of selection sort that selects the largest value in the following array and sorts in ascending order: {54,26,93,17,77,31,44,55,20}

Shade the boxes that represent the sorted list in each row.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Original | 54 | 26 | 93 | 17 | 77 | 31 | 44 | 55 | 20 |
| 1st Pass |  |  |  |  |  |  |  |  |  |
| 2nd Pass |  |  |  |  |  |  |  |  |  |
| 3rd Pass |  |  |  |  |  |  |  |  |  |
| 4th Pass |  |  |  |  |  |  |  |  |  |
| 5th Pass |  |  |  |  |  |  |  |  |  |
| 6th Pass |  |  |  |  |  |  |  |  |  |

1. Show the first 6 passes of insertion sort on the following array sorting in ascending orders: {54,26,93,17,77,31,44,55,20}

Shade the boxes that represent the sorted array in each row.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Original | 54 | 26 | 93 | 17 | 77 | 31 | 44 | 55 | 20 |
| 1st Pass |  |  |  |  |  |  |  |  |  |
| 2nd Pass |  |  |  |  |  |  |  |  |  |
| 3rd Pass |  |  |  |  |  |  |  |  |  |
| 4th Pass |  |  |  |  |  |  |  |  |  |
| 5th Pass |  |  |  |  |  |  |  |  |  |
| 6th Pass |  |  |  |  |  |  |  |  |  |