

The screenshot shows an IDE window titled "CSC321PA - InsertionSort.java". The code defines an InsertionSort class with a main method that reads a file "10\_Sorted.txt" and sorts its contents using Insertion Sort. The output window shows the following sequence of arrays as the file is processed:

```
[0, 0, 1, 2, 4]
[0, 0, 2, 8, 9]
[0, 0, 2, 5, 6]
[0, 1, 1, 7, 8]
Im sorting C:\Users\Jayden\Desktop\TestFiles\10_Sorted.txt Using Insertion sort
[0, 1, 1, 7, 8]
[0, 0, 2, 5, 6]
[0, 0, 2, 8, 9]
[0, 0, 1, 2, 4]
[0, 2, 4, 7, 9]
[1, 1, 2, 5, 6]
[3, 4, 5, 5, 7]
[1, 2, 6, 6, 7]
[0, 0, 5, 7, 9]
[0, 1, 4, 9, 9]
Process finished with exit code 0
```

The screenshot shows an IDE window titled "CSC321PA - MergeSort.java". The code defines a MergeSort class with a main method that reads a file "10\_Sorted.txt" and sorts its contents using Merge Sort. The output window shows the same sequence of arrays as the previous screenshot, but the sorting step is labeled "Using merge sort":

```
[0, 0, 1, 2, 4]
[0, 0, 2, 8, 9]
[0, 0, 2, 5, 6]
[0, 1, 1, 7, 8]
Im sorting C:\Users\Jayden\Desktop\TestFiles\10_Sorted.txt Using merge sort
[0, 1, 1, 7, 8]
[0, 0, 2, 5, 6]
[0, 0, 2, 8, 9]
[0, 0, 1, 2, 4]
[0, 2, 4, 7, 9]
[1, 1, 2, 5, 6]
[3, 4, 5, 5, 7]
[1, 2, 6, 6, 7]
[0, 0, 5, 7, 9]
[0, 1, 4, 9, 9]
Process finished with exit code 0
```

