**Program Structures & Algorithms**

**Spring 2022**

**Assignment No. 2**

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* **Task: BenchMark**
* **[Part1] Timer and Benchmark**

**Graphical user interface, text

Description automatically generated**

**Pass 9 Tests, Fail Test testRepeat3**

**Graphical user interface

Description automatically generated**

**Pass one test, fail test testWaitPeriods**

**Graphical user interface, text, application

Description automatically generated**

**[Part2] Insertion Sort**

Graphical user interface, text, application

Description automatically generated

Pass five tests, fail sort2 test

The output of the failure:

Graphical user interface, text, application

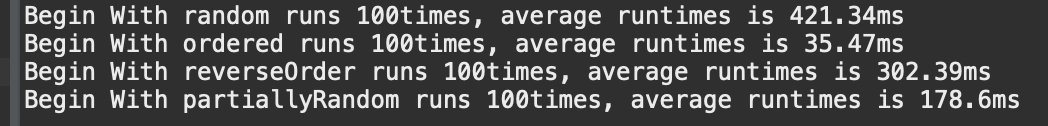
Description automatically generated

**[Part3] Running times of four different array**

**Run array length of 10000 one hundred times**

**Graphical user interface

Description automatically generated**

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We can conclude that In the Worst Case i.e. when the array is randomly sorted and In the Best Case i.e. when the array is already sorted, Partially Random will run faster than random. And reverse order is the third slow.SÏ