Gebze Technical University
Computer Engineering

CSE 222
2019 Spring

HOMEWORK 2 REPORT

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1 INTRODUCTION

1.1 Problem Definition

We have machine learning experiment informations and we have to create a linked list structure to reach this experiments. Every machine learning experiment includes time,day,accuracy,completed and setup information. We have to list them logically according to day information to keep experiments of machine learning.

1.2 System Requirements

Fort his Project I needed:

- A single linked list structure. ExperimentList class is represents a single linked list and stores the Experiment informations. The class has many methods to evaluate datas such as adding,removing,sorting,printing and listing,getting and setting.
- Experiment class is the node of ExperimentList class. It stores time,day,accuracy,completed and setup information of experiments.Every experiment indicates a next experiment and next day of experiment list. Experiment class includes toString() overrided method and constructer.
- ExperimentList class and Experiment class work with together. Experiment class is Node of experiment linked list structure.

1.3 Class Diagrams

No class diagrams.

1.4 Use Case Diagrams

No use-case diagram.

1.5 Problem Solution Approach

I created a Linked-List structure and add it Experiments. addExp method add it ordered by day information. This method took a long time but when i finished the method correctly, the other methods are easier for me. OrderDay and OrderExperiments methods are “n square” complexity. The other methods are “n” complexity. Every methods include while loops to iterate in Linked-List because of reach to next element.

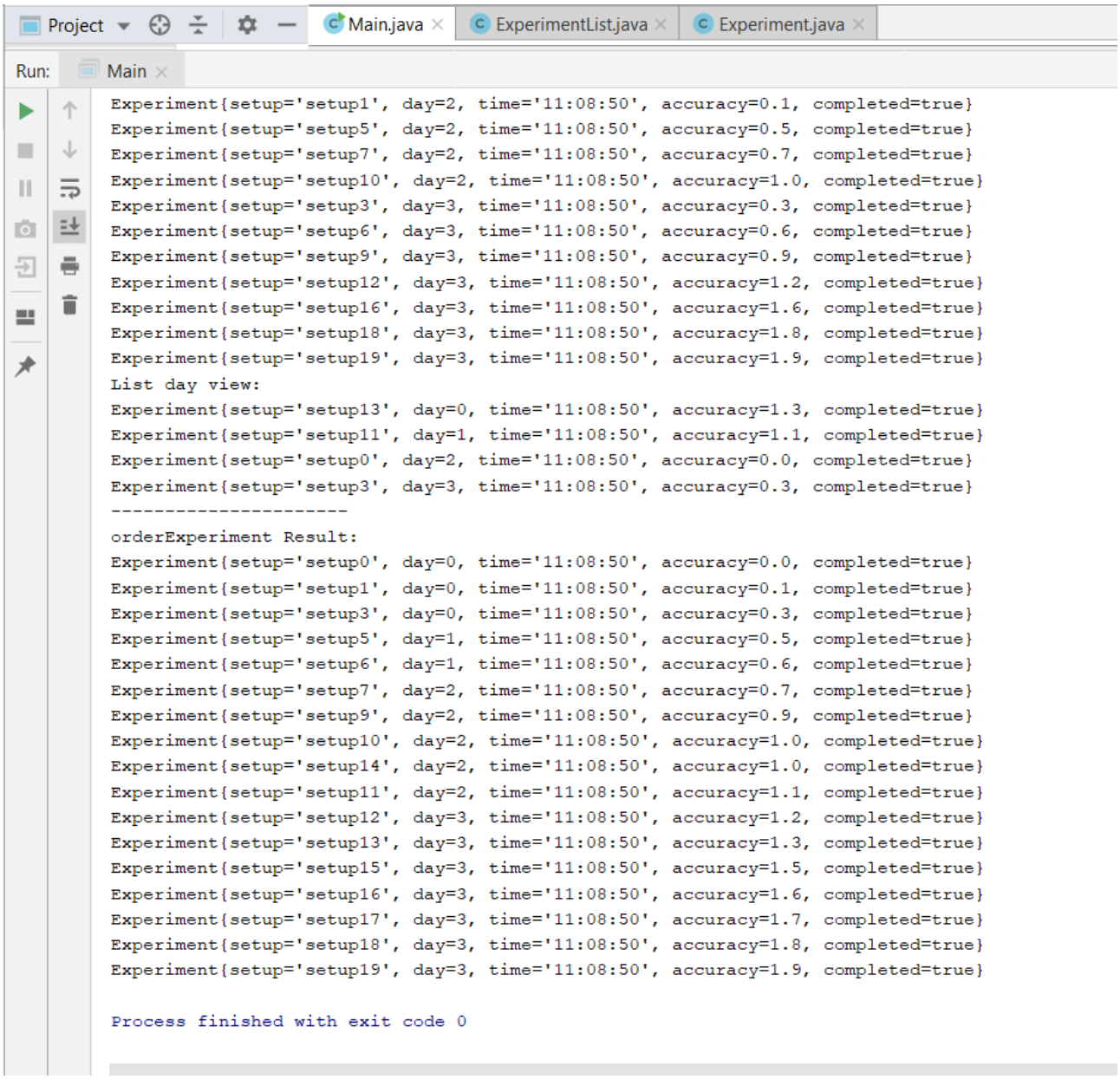
2 RESULT

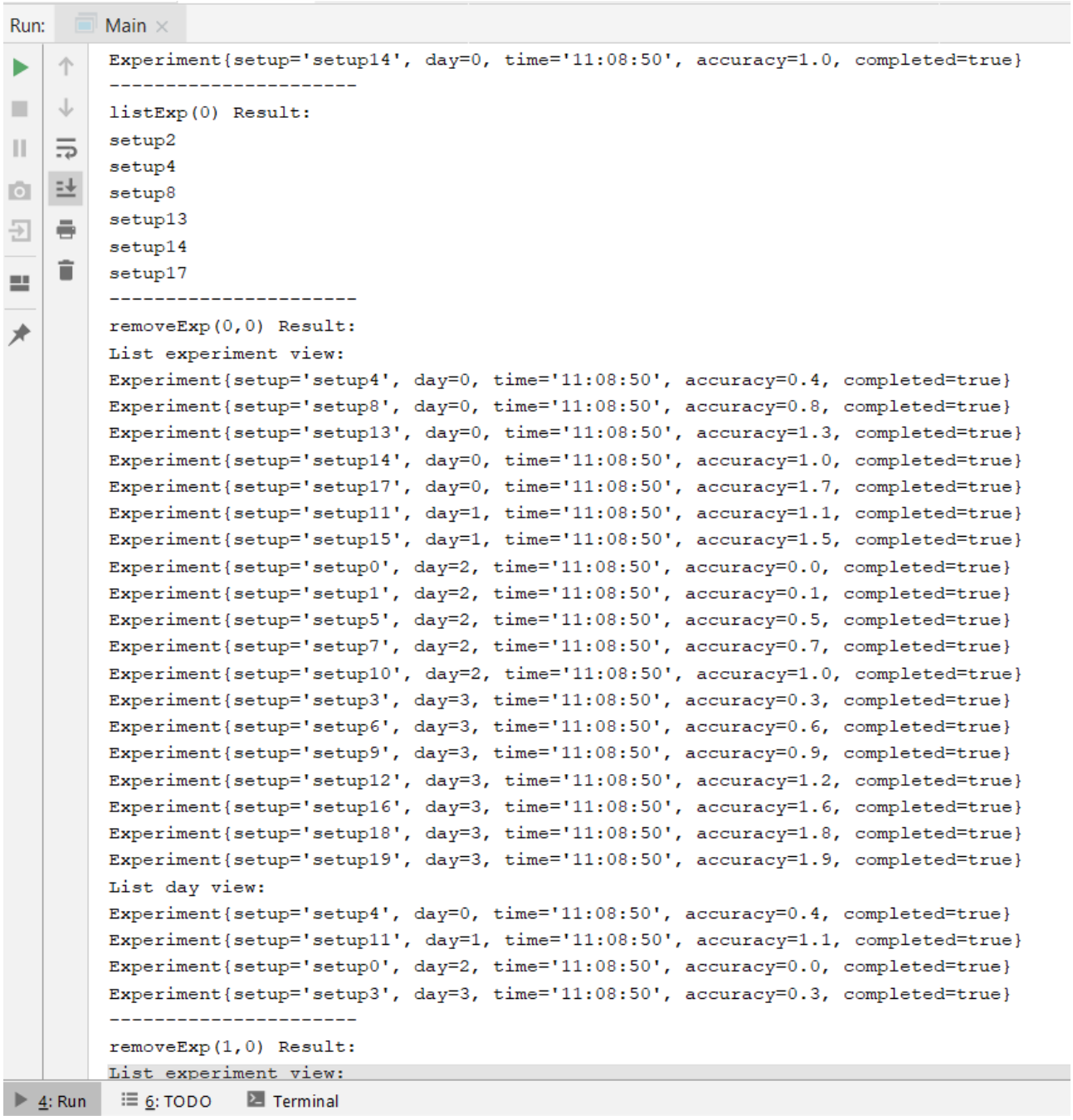
2.1 Test Cases

Test cases are give bigger day information existing experiment etc.

Note: Test case is given from Assistant like a file. Running results are belong to that cases.

2.2 Running Results




Run:
Main
Experiment{setup='setup14', day=0, time='11:08:50', accuracy=1.0, completed=true}
----
listExp(0) Result:
setup2
setup4
setup8
setup13
setup14
setup17
----
removeExp(0,0) Result:
List experiment view:
Experiment{setup='setup4', day=0, time='11:08:50', accuracy=0.4, completed=true}
Experiment{setup='setup8', day=0, time='11:08:50', accuracy=0.8, completed=true}
Experiment{setup='setup13', day=0, time='11:08:50', accuracy=1.3, completed=true}
Experiment{setup='setup14', day=0, time='11:08:50', accuracy=1.0, completed=true}
Experiment{setup='setup17', day=0, time='11:08:50', accuracy=1.7, completed=true}
Experiment{setup='setup11', day=1, time='11:08:50', accuracy=1.1, completed=true}
Experiment{setup='setup15', day=1, time='11:08:50', accuracy=1.5, completed=true}
Experiment{setup='setup0', day=2, time='11:08:50', accuracy=0.0, completed=true}
Experiment{setup='setup1', day=2, time='11:08:50', accuracy=0.1, completed=true}
Experiment{setup='setup5', day=2, time='11:08:50', accuracy=0.5, completed=true}
Experiment{setup='setup7', day=2, time='11:08:50', accuracy=0.7, completed=true}
Experiment{setup='setup10', day=2, time='11:08:50', accuracy=1.0, completed=true}
Experiment{setup='setup3', day=3, time='11:08:50', accuracy=0.3, completed=true}
Experiment{setup='setup6', day=3, time='11:08:50', accuracy=0.6, completed=true}
Experiment{setup='setup9', day=3, time='11:08:50', accuracy=0.9, completed=true}
Experiment{setup='setup12', day=3, time='11:08:50', accuracy=1.2, completed=true}
Experiment{setup='setup16', day=3, time='11:08:50', accuracy=1.6, completed=true}
Experiment{setup='setup18', day=3, time='11:08:50', accuracy=1.8, completed=true}
Experiment{setup='setup19', day=3, time='11:08:50', accuracy=1.9, completed=true}
List day view:
Experiment{setup='setup4', day=0, time='11:08:50', accuracy=0.4, completed=true}
Experiment{setup='setup11', day=1, time='11:08:50', accuracy=1.1, completed=true}
Experiment{setup='setup0', day=2, time='11:08:50', accuracy=0.0, completed=true}
Experiment{setup='setup3', day=3, time='11:08:50', accuracy=0.3, completed=true}
----
removeExp(1,0) Result:
List experiment view:
4: Run
6: TODO
Terminal