

FileEditViewNavigateCodeRefactorBuildRunToolsVCSWindowHelp

Assignment 2.iml - Main.java

Assignment 2> src> Main.java> Employee> toString

Main.java x

Assignment 2.iml x

EmployeeData.txt x

Project

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10 usages

class EmployeeSorter {

1 usage
@ static ArrayList<Employee> readFile(String fileName) throws IOException {
 ArrayList<Employee> employees = new ArrayList<>();
 try (BufferedReader br = new BufferedReader(new FileReader(fileName))) {
 String line;
 while ((line = br.readLine()) != null) {
 String[] values = line.split(regex: ",");
 int id = Integer.parseInt(values[0]);
 String name = values[1];
 String department = values[2];
 double salary = Double.parseDouble(values[3]);
 double bonus = Double.parseDouble(values[4]);
 employees.add(new Employee(id, name, department, salary, bonus));
 }
 }
 return employees;
}

1 usage
@ static void bubbleSort(ArrayList<Employee> employees) {
 int n = employees.size();
 for (int i = 0; i < n - 1; i++) {
 for (int j = 0; j < n - i - 1; j++) {
 if (employees.get(i).name.compareTo(employees.get(j + 1).name) > 0) {
 Employee temp = employees.get(i);
 employees.set(i, employees.get(j + 1));
 employees.set(j + 1, temp);
 }
 }
 }
}

Bookmarks

Structure

Version Control

TODO

Problems

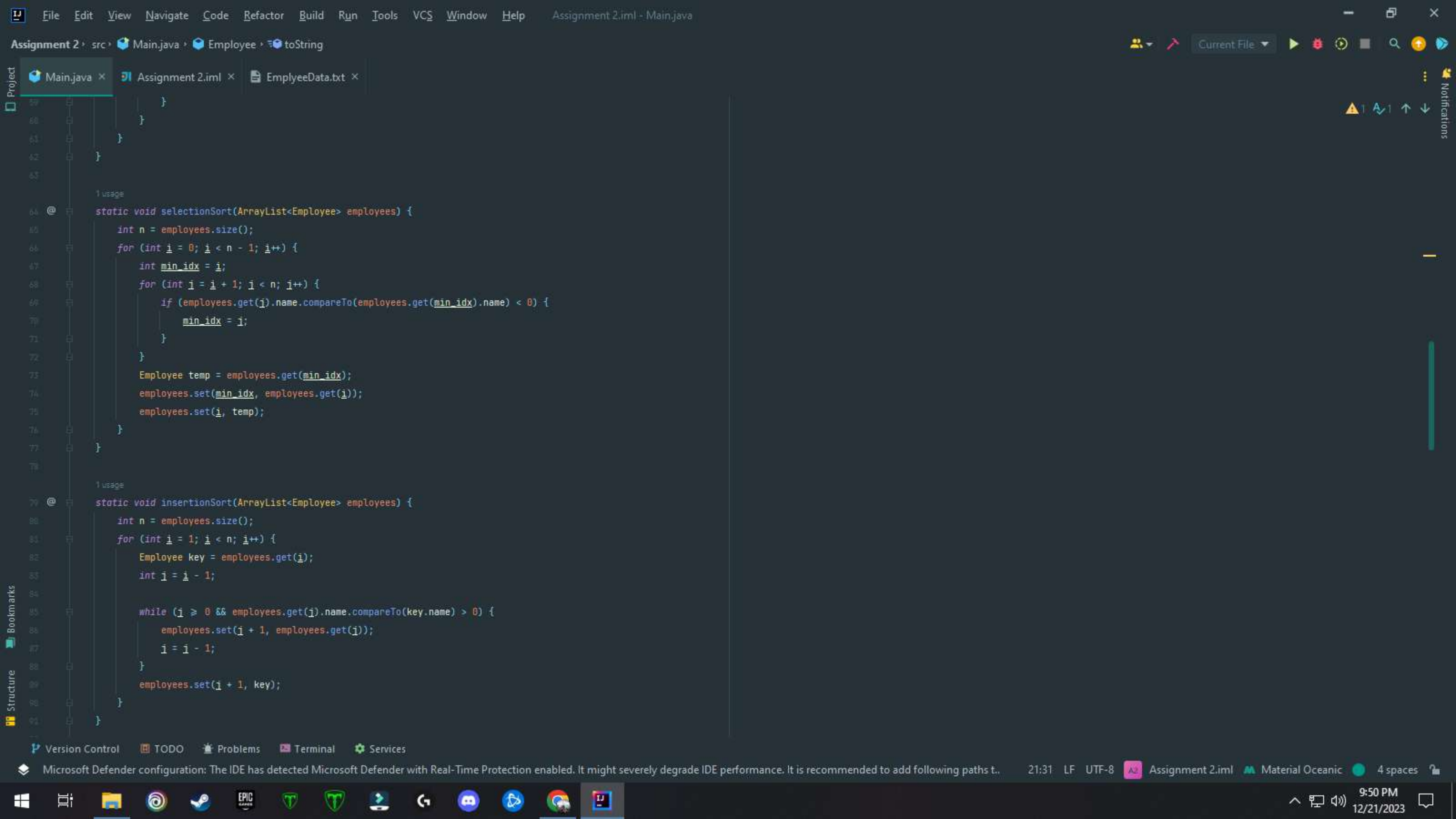
Terminal

Services

Microsoft Defender configuration: The IDE has detected Microsoft Defender with Real-Time Protection enabled. It might severely degrade IDE performance. It is recommended to add following paths t...

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Assignment 2.iml - Main.java

Assignment 2srcMain.javaEmployeetoString

Main.javaAssignment 2.imlEmployeeData.txt

Project

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1 usage

@private static void merge(ArrayList<Employee> employees, int l, int m, int r) {

ArrayList<Employee> left = new ArrayList<>(employees.subList(l, m + 1));

ArrayList<Employee> right = new ArrayList<>(employees.subList(m + 1, r + 1));

int i = 0, j = 0;

int k = l;

while (i < left.size() && j < right.size()) {

if (left.get(i).name.compareTo(right.get(j).name) <= 0) {

employees.set(k, left.get(i));

i++;

} else {

employees.set(k, right.get(j));

j++;

}

k++;

}

while (i < left.size()) {

employees.set(k, left.get(i));

i++;

k++;

}

while (j < right.size()) {

employees.set(k, right.get(j));

j++;

k++;

}

}

3 usages

static void mergeSort(ArrayList<Employee> employees, int l, int r) {

if (l < r) {

Bookmarks

Structure

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Assignment 2.iml x

EmployeeData.txt x

3 usages

123 static void mergeSort(ArrayList<Employee> employees, int l, int r) {

124 if (l < r) {

125 int m = l + (r - l) / 2;

126 mergeSort(employees, l, m);

127 mergeSort(employees, m + 1, r);

128 merge(employees, l, m, r);

129 }

130 }

131

5 usages

132 @ static void printEmployees(ArrayList<Employee> employees) {

133 for (Employee emp : employees) {

134 System.out.println(emp);

135 }

136 }

137 }

138

139 public class Main {

140 public static void main(String[] args) {

141 try {

142 ArrayList<Employee> employees = EmployeeSorter.readFile(fileName: "EmployeeData.txt");

143

144 System.out.println("Original List:");

145 EmployeeSorter.printEmployees(employees);

146

147 ArrayList<Employee> sortedEmployees = new ArrayList<>(employees);

148 EmployeeSorter.bubbleSort(sortedEmployees);

149 System.out.println("\nSorted by Bubble Sort:");

150 EmployeeSorter.printEmployees(sortedEmployees);

151

152 sortedEmployees = new ArrayList<>(employees);

153 EmployeeSorter.selectionSort(sortedEmployees);

154 System.out.println("\nSorted by Selection Sort:");

155 EmployeeSorter.printEmployees(sortedEmployees);

Version Control

TODO

Problems

Terminal

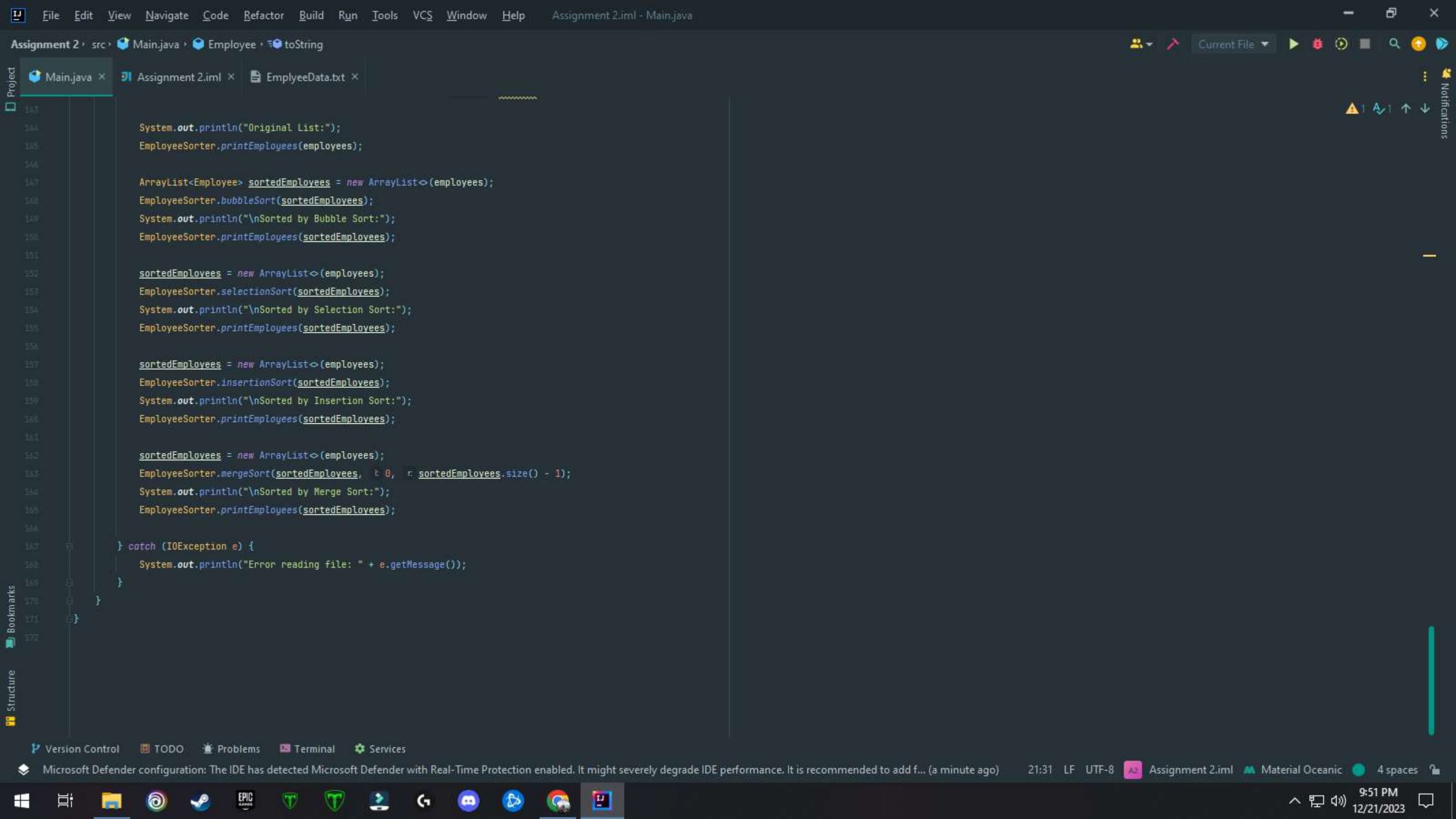
Services


Microsoft Defender configuration: The IDE has detected Microsoft Defender with Real-Time Protection enabled. It might severely degrade IDE performance. It is recommended to add f... (a minute ago)

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Windows Taskbar

System Tray



 Notifications

```
Employee{id=4, name='Zohaib Shamim', department='Sales', salary=70000.0, bonus=3000.0}
```


FileEditViewNavigateCodeRefactorBuildRunToolsVCSWindowHelpAssignment 2.iml - Main.java

Assignment 2> src> Main.java> Main> main

ProjectMain.javaAssignment 2.imlEmployeeData.txt

Run: Main

Sorted by Selection Sort:

Employee{id=6, name='Ayesha Ali', department='Product Development', salary=82000.0, bonus=5500.0}

Employee{id=9, name='Bilal Ahmed', department='Operations', salary=70000.0, bonus=3300.0}

Employee{id=2, name='Farrukh Iqbal', department='Marketing', salary=75000.0, bonus=4000.0}

Employee{id=3, name='Fuzail', department='Finance', salary=72000.0, bonus=3500.0}

Employee{id=7, name='Hassan Mehmood', department='Customer Support', salary=65000.0, bonus=2800.0}

Employee{id=1, name='Maaz Khan', department='Engineering', salary=80000.0, bonus=5000.0}

Employee{id=10, name='Nadia Khan', department='Legal', salary=77000.0, bonus=4500.0}

Employee{id=5, name='Raif', department='Human Resources', salary=68000.0, bonus=3200.0}

Employee{id=8, name='Sara Iqbal', department='IT', salary=76000.0, bonus=4200.0}

Employee{id=4, name='Zohaib Shamim', department='Sales', salary=70000.0, bonus=3000.0}

Sorted by Insertion Sort:

Employee{id=6, name='Ayesha Ali', department='Product Development', salary=82000.0, bonus=5500.0}

Employee{id=9, name='Bilal Ahmed', department='Operations', salary=70000.0, bonus=3300.0}

Employee{id=2, name='Farrukh Iqbal', department='Marketing', salary=75000.0, bonus=4000.0}

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Employee{id=5, name='Raif', department='Human Resources', salary=68000.0, bonus=3200.0}

Employee{id=8, name='Sara Iqbal', department='IT', salary=76000.0, bonus=4200.0}

Employee{id=4, name='Zohaib Shamim', department='Sales', salary=70000.0, bonus=3000.0}

Sorted by Merge Sort:

Employee{id=6, name='Ayesha Ali', department='Product Development', salary=82000.0, bonus=5500.0}

Employee{id=9, name='Bilal Ahmed', department='Operations', salary=70000.0, bonus=3300.0}

Version ControlRunTODOProblemsTerminalServicesBuild

Build completed successfully in 3 sec, 716 ms (moments ago)

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FileEditViewNavigateCodeRefactorBuildRunToolsVCSWindowHelpAssignment 2.iml - Main.java

Assignment 2 ▸ src ▸ Main.java ▸ Main ▸ main

Run: Main

Employee{id=4, name='Zohaib Shamim', department='Sales', salary=70000.0, bonus=3000.0}

Sorted by Insertion Sort:

Employee{id=6, name='Ayesha Ali', department='Product Development', salary=82000.0, bonus=5500.0}

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Sorted by Merge Sort:

Employee{id=6, name='Ayesha Ali', department='Product Development', salary=82000.0, bonus=5500.0}

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Employee{id=4, name='Zohaib Shamim', department='Sales', salary=70000.0, bonus=3000.0}

Process finished with exit code 0

Version ControlRunTODOProblemsTerminalServicesBuild

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LFUTF-8Assignment 2.imlMaterial Oceanic4 spaces

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