

1st Runtime Output

```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src \ Tester_Employee
Run: Tester_Employee
/Library/Java/JavaVirtualMachines/1.6.0_jdk/Contents/Home/bin/java ...

Employee Information

1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
1

What type of employee would you like to add?
Enter 'Staff':
Enter 'Faculty':
Enter 'Partime':
Enter choice:
Faculty
Enter Last Name:
aaa
Enter First Name:
bbb
Enter ID Number:
444
Enter Gender:
M
Enter the birthday in the following order: MM/DD/YYYY
12
25
1998
Enter this faculty employee's level from three choices:
1) Assistant Professor:
2) Associate Professor:
3) Full Time Professor:
Choice:
```

```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src \ Tester_Employee
Run: Tester_Employee

Choice:
2
Enter degree:
Ph.D.
Enter major:
Engineering
Enter research:
3

Employee Information

1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
2

What type of employee would you like to add?
Enter 'Staff':
Enter 'Faculty':
Enter 'Partime':
Enter choice:
Staff
Enter Last Name:
vvv
Enter First Name:
rrr
Enter ID Number:
111
Enter Gender:
M
Enter the birthday in the following order: MM/DD/YYYY
3
3
2000
Enter this staff employee's level from three choices:
1) Assistant Staff:
2) Associate Staff:
3) Full Time Staff:
Choice:
```

```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src
Tester_Employee
Employee.java
Faculty.java
Staff.java
Parttime.java
EmployeeIdComparator.java
EmployeeFactory.java
Tester_Employee.java

Run: Tester_Employee
Enter the birthday in the following order: MM/DD/YYYY
3
23
1987
Enter the hourly rate:
50.0

Employee Information

1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
1

What type of employee would you like to add?
Enter 'Staff':
Enter 'Faculty':
Enter 'Parttime':
Enter choice:
Parttime
Enter Last Name:
vvv
Enter First Name:
ggg
Enter ID Number:
333
Enter Gender:
F
Enter the birthday in the following order: MM/DD/YYYY
4
12
1959
```

```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src
Tester_Employee
Employee.java
Faculty.java
Staff.java
Parttime.java
EmployeeIdComparator.java
EmployeeFactory.java
Tester_Employee.java

Run: Tester_Employee
Enter the hourly rate:
50.0
Enter the hours worked:
50

Employee Information

1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
2

1) Display employees sorted by ID number in ascending order
2) Display employees sorted by last name in descending order

1

Part 0: Sorting by ID number in ascending order...

Last Name: vvv
First name: rrr
ID: 111
Sex: M
Birth date: 3/23/1987
Hourly rate: $50.00
Monthly Salary: $8000.00

Last Name: yyy
First name: ggg
ID: 333
Sex: F
Birth date: 4/12/1959
Hourly rate: $50.00
```

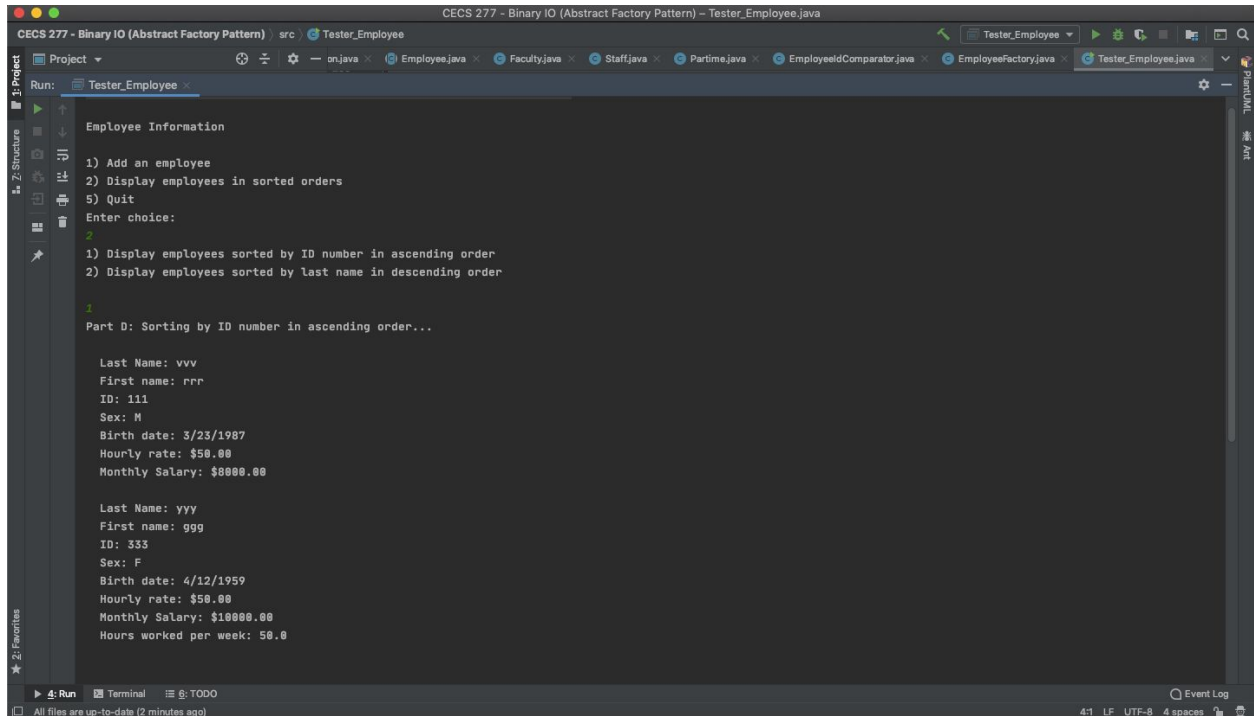
```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src \ Tester_Employee
Tester_Employee
Employee.java \ Faculty.java \ Staff.java \ Parttime.java \ EmployeeIdComparator.java \ EmployeeFactory.java \ Tester_Employee.java
Run: Tester_Employee
First name: ggg
ID: 333
Sex: F
Birth date: 4/12/1959
Hourly rate: $50.00
Monthly Salary: $10000.00
Hours worked per week: 50.0

Last Name: aaa
First name: bbb
ID: 444
Sex: M
Birth date: 0/25/1991
Level: ASSOCIATE_PROFESSOR
Degree: Ph.D.
Major: Engineering
Research: 3
Monthly Salary: $7500.00

Employee Information
1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
5
Goodbye!

Process finished with exit code 0
4: Run Terminal 8: TODO
All files are up-to-date (2 minutes ago) 56:1 LF UTF-8 4 spaces Event Log
```

2nd Runtime Output

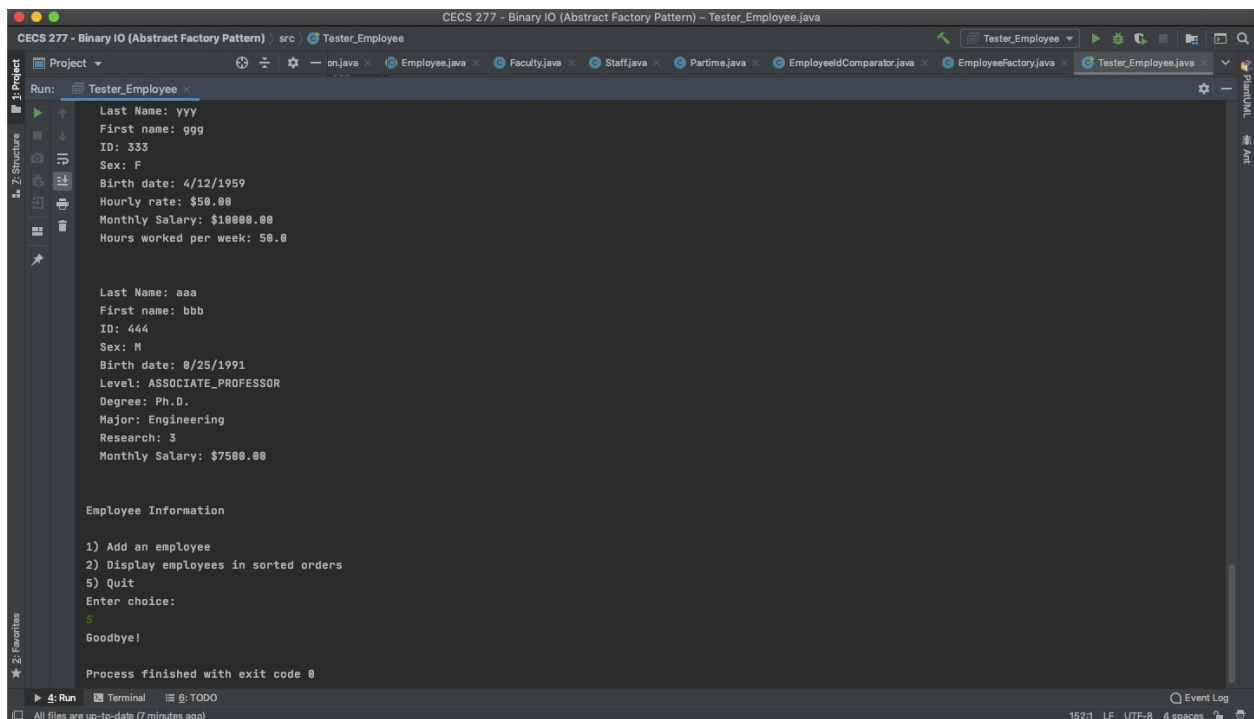


```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src \ Tester_Employee
Run: Tester_Employee
Employee Information
1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
2
1) Display employees sorted by ID number in ascending order
2) Display employees sorted by last name in descending order

1
Part D: Sorting by ID number in ascending order...

Last Name: vvv
First name: rrr
ID: 111
Sex: M
Birth date: 3/23/1987
Hourly rate: $50.00
Monthly Salary: $8000.00

Last Name: yyy
First name: ggg
ID: 333
Sex: F
Birth date: 4/12/1959
Hourly rate: $50.00
Monthly Salary: $10000.00
Hours worked per week: 50.0
```



```
CECS 277 - Binary IO (Abstract Factory Pattern) - Tester_Employee.java
src \ Tester_Employee
Run: Tester_Employee
Last Name: yyy
First name: ggg
ID: 333
Sex: F
Birth date: 4/12/1959
Hourly rate: $50.00
Monthly Salary: $10000.00
Hours worked per week: 50.0

Last Name: aaa
First name: bbb
ID: 444
Sex: M
Birth date: 0/25/1991
Level: ASSOCIATE_PROFESSOR
Degree: Ph.D.
Major: Engineering
Research: 3
Monthly Salary: $7500.00

Employee Information
1) Add an employee
2) Display employees in sorted orders
5) Quit
Enter choice:
5
Goodbye!

Process finished with exit code 0
```