

```
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ  
IDEA Community Edition 2022.2.3\lib\idea_rt.jar=64184:C:\Program Files\JetBrains\IntelliJ  
IDEA Community Edition 2022.2.3\bin" -Dfile.encoding=UTF-8 -Dsun.stdout.encoding=UTF-8  
-Dsun.stderr.encoding=UTF-8 -classpath F:\CS401prj\target\classes org.example.Main
```

1. Add Employee Data
2. Sort Employee List
3. Search Employee List
4. Exit

Enter your choice: 1

Select data input method:

1. Manual Entry
2. Read from emp.txt file

1

Enter the number of employees to add: 4

Enter employee name: kelvin

Enter employee ID: 23

Enter employee name: john

Enter employee ID: 67

Enter employee name: wilfred

Enter employee ID: 50

Enter employee name: henry

Enter employee ID: 19

An non sorted Employee List

Employee{name='kelvin', id=23}

Employee{name='john', id=67}

Employee{name='wilfred', id=50}

Employee{name='henry', id=19}

1. Add Employee Data
2. Sort Employee List
3. Search Employee List
4. Exit

Enter your choice: 2

***** Sorting Options: *****

1. Selection Sort
2. Quicksort

Enter sorting algorithm choice: 1

Sorted Employee List:

Employee{name='henry', id=19}

Employee{name='kelvin', id=23}

Employee{name='wilfred', id=50}

Employee{name='john', id=67}

Comparisons: 6

1. Add Employee Data
2. Sort Employee List

3. Search Employee List

4. Exit

Enter your choice: 2

***** Sorting Options: *****

1. Selection Sort

2. Quicksort

Enter sorting algorithm choice: 2

Sorted Employee List:

Employee{name='henry', id=19}

Employee{name='kelvin', id=23}

Employee{name='wilfred', id=50}

Employee{name='john', id=67}

Comparisons: 6

1. Add Employee Data

2. Sort Employee List

3. Search Employee List

4. Exit

Enter your choice: 3

Searching Options:

1. Linear Search

2. Binary Search

3. Hash Function Search

Enter searching algorithm choice:

1

Enter the employee ID to search:

50

***** Search Result *****

Employee found with ID 50

Comparisons: 3

1. Add Employee Data
2. Sort Employee List
3. Search Employee List
4. Exit

Enter your choice: 3

Searching Options:

1. Linear Search
2. Binary Search
3. Hash Function Search

Enter searching algorithm choice:

2

Enter the employee ID to search:

19

***** Search Result ****

Employee found with ID 19

Comparisons: 2

1. Add Employee Data
2. Sort Employee List
3. Search Employee List
4. Exit

Enter your choice: 3

Searching Options:

1. Linear Search
2. Binary Search
3. Hash Function Search

Enter searching algorithm choice:

3

Enter the employee ID to search:

67

***** Search Result ****

Employee found with ID 67

Comparisons: 1

1. Add Employee Data
2. Sort Employee List
3. Search Employee List
4. Exit

Enter your choice: 4

Process finished with exit code 0