LAB REPORT 实验报告

Lab Title	if-else-if statement			Lab No.	03
Stud. Name		Major	Computer Science & Technology	Class	
Student ID					

Lab description/objectives:

Based on an automobile's model year and weight, the state of New Jersey determines the car's weight class and registration fee using the following schedule:

Model Year Registration	Weight	Weight Class	Fee
1970 or earlier	less than 2,700 ,lbs	1	$16.50
	2,700 to 3,800lbs	2	25.50
	more than 3,800 lbs	3	46.50
1971 to 1979	less than 2,700 lbs	4	27.00
	2,700 to 3,800 lbs	5	30.50
	more than 3,800 lbs	6	52.50
1980 or later	less than 3,500 lbs	7	35.50
	3,500 or more lbs	8	65.50

Using this information, write a C program that accepts the year and weight of an automobile and determines and displays the weight class and registration fee for the car.

Source code:

```c
#include <stdio.h>
int main() {
    int year, weight;
    scanf("%d %d", &year, &weight);
    if (year <= 1970) {
        if (weight < 2700) {
            printf("%d $%.2f", 1, 16.50);
        } else if (weight <= 3800) {
            printf("%d $%.2f", 2, 25.50);
        } else {
            printf("%d $%.2f", 3, 46.50);
        }
    } else if (year >= 1980) {
        if (weight < 3500) {
            printf("%d $%.2f", 7, 35.50);
        } else {
            printf("%d $%.2f", 8, 65.50);
        }
    } else {
        if (weight < 2700) {
            printf("%d $%.2f", 4, 27.00);
        } else if (weight <= 3800) {
            printf("%d $%.2f", 5, 30.50);
        } else {
            printf("%d $%.2f", 6, 52.50);
        }
    }
    return 0;
}
```
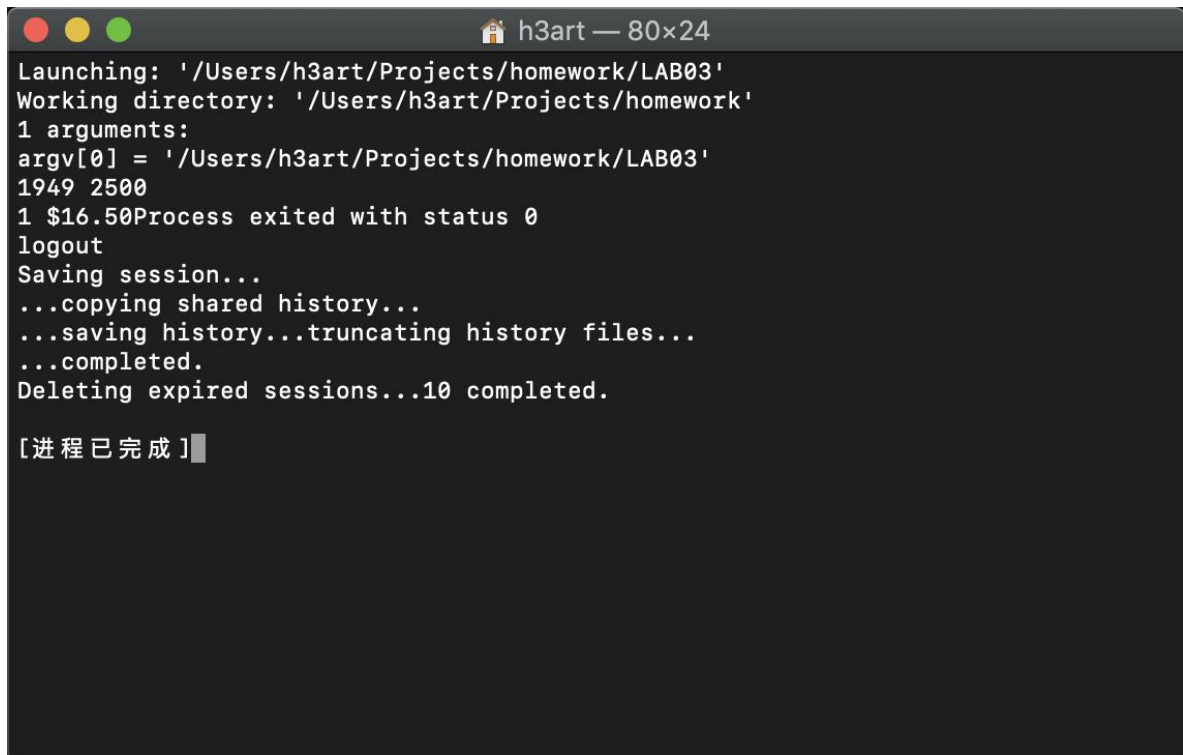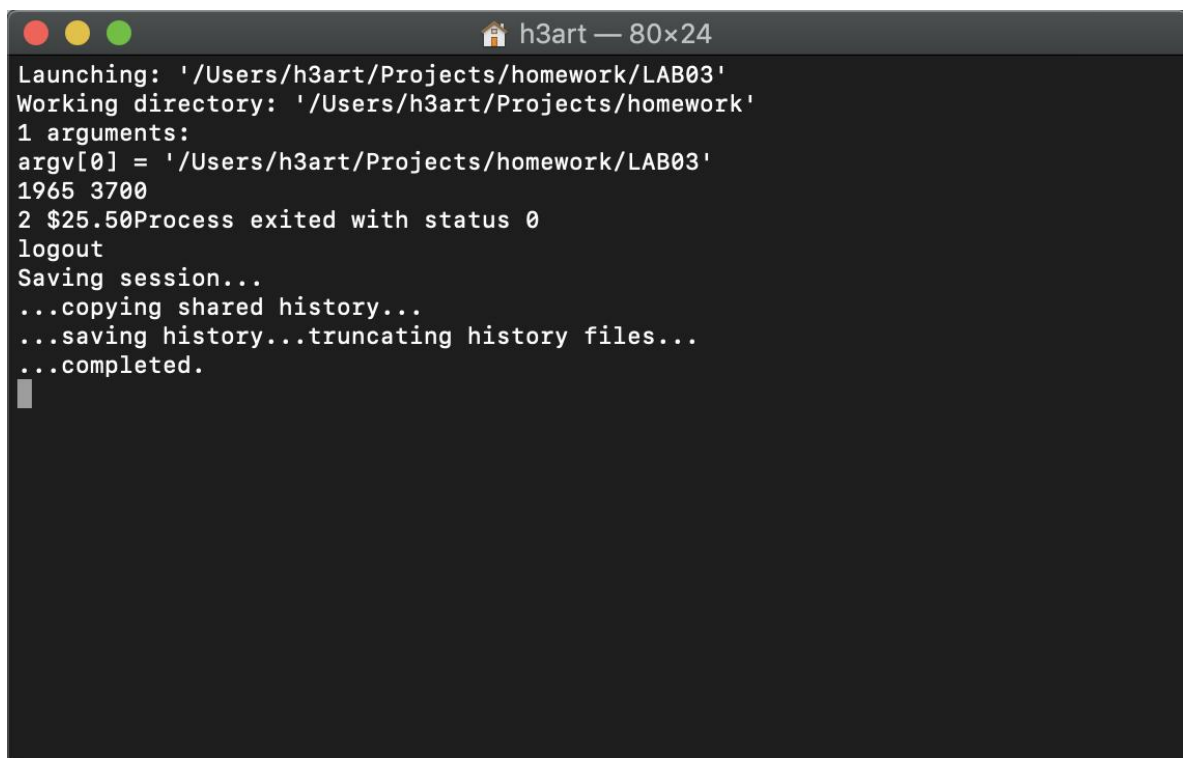
Program outputs:

```
h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1949 2500
1 $16.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
Deleting expired sessions...10 completed.

[进程已完成]
```

```
h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1965 3700
2 $25.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
```

```
h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1969 4800
3 $46.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
```

```
h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1976 2500
4 $27.00Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
```

```
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1978 3500
5 $30.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.
```

```
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1977 4000
6 $52.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]
```

```
● ● ●                    🏠 h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1987 3000
7 $35.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]█
```

```
● ● ●                    🏠 h3art — 80×24
Launching: '/Users/h3art/Projects/homework/LAB03'
Working directory: '/Users/h3art/Projects/homework'
1 arguments:
argv[0] = '/Users/h3art/Projects/homework/LAB03'
1999 4500
8 $65.50Process exited with status 0
logout
Saving session...
...copying shared history...
...saving history...truncating history files...
...completed.

[进程已完成]█
```

Discussion:

1. **Most difficult parts**

   Recognize the relationship among circumstances.

2. **Bugs and/or Errors**