**import** java.text.SimpleDateFormat;

**import** java.util.Calendar;

**import** java.util.Scanner;

**public** **class** ClassScheduleAlarm {

**private** **static** **final** String[] ***DAYS*** = {"星期一", "星期二", "星期三", "星期四", "星期五", "星期六", "星期日"};

**private** **static** String[][] *schedule* = **new** String[7][2]; // 7天，每个工作日包含课程名称和地点

**private** **static** Scanner *scanner* = **new** Scanner(System.***in***);

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

**boolean** running = **true**;

**while** (running) {

System.***out***.println("请选择功能：");

System.***out***.println("1 - 输入课表");

System.***out***.println("2 - 查询课表");

System.***out***.println("3 - 设置闹钟提醒");

System.***out***.println("其他数字 - 退出程序");

**int** choice = *scanner*.nextInt();

*scanner*.nextLine(); // 清除输入缓冲区

**switch** (choice) {

**case** 1:

*inputSchedule*();

**break**;

**case** 2:

*printSchedule*();

**break**;

**case** 3:

*setAlarm*();

**break**;

**default**:

running = **false**;

System.***out***.println("程序已退出。");

}

}

*scanner*.close(); // 关闭Scanner

}

**private** **static** **void** inputSchedule() {

**for** (**int** i = 0; i < ***DAYS***.length; i++) {

System.***out***.println("请输入" + ***DAYS***[i] + "的上课时间及地点（格式：HH:mm,地点）");

String input = *scanner*.nextLine();

String[] parts = input.split(",");

*schedule*[i][0] = parts[0]; // 上课时间

*schedule*[i][1] = parts[1]; // 地点

}

}

**private** **static** **void** printSchedule() {

**for** (**int** i = 0; i < ***DAYS***.length; i++) {

System.***out***.println(***DAYS***[i] + "：课程名称 - " + *schedule*[i][0] + ", 上课地点 - " + *schedule*[i][1]);

}

}

**private** **static** **void** setAlarm() {

System.***out***.print("请输入要提醒的日期（1-7，1表示星期一，7表示星期日）：");

**int** dayOfWeek = *scanner*.nextInt() - 1; // 数组索引从0开始

*scanner*.nextLine(); // 清除输入缓冲区

**if** (dayOfWeek >= 0 && dayOfWeek < ***DAYS***.length) {

System.***out***.print("请输入上课时间（格式：HH:mm）：");

String classTime = *scanner*.nextLine();

System.***out***.print("请输入上课地点：");

String location = *scanner*.nextLine();

*schedule*[dayOfWeek][0] = classTime;

*schedule*[dayOfWeek][1] = location;

// 设置闹钟

SimpleDateFormat sdf = **new** SimpleDateFormat("HH:mm");

Calendar calendar = Calendar.*getInstance*();

**try** {

calendar.setTime(sdf.parse(classTime));

calendar.add(Calendar.***MINUTE***, -15); // 提前15分钟

System.***out***.println("闹钟设置成功！提醒时间为：" + sdf.format(calendar.getTime()));

} **catch** (Exception e) {

System.***out***.println("输入的时间格式有误，请重新输入。");

}

} **else** {

System.***out***.println("输入的日期无效，请输入1-7之间的数字。");

}

}

}