

```

        System.out.println("Exiting program... good bye");
        exit = true;
        break;

    case 1:
        System.out.println("You are now adding a new event to the Calendar
        . \n");

        System.out.print("Enter the name of the event: ");
        eventName = stdin.readLine();
        System.out.println(eventName);

        System.out.print("Enter day of event: ");
        day = Integer.parseInt(stdin.readLine());

        System.out.println(day);
        Event.addDay(day);

        System.out.print("Enter month of event: ");
        month = stdin.readLine();
        System.out.println(month);
        Event.addMonth(month);

        System.out.print("Enter year of event: ");
        year = Integer.parseInt(stdin.readLine());
        System.out.println(year);
        Event.addYear(year);
        date = Event.getDate(month, day, year);

        if(EventCollection.eventMap.containsKey(eventName))
        {
            System.out.println("Event " + "'" + eventName + "'" + " already
y exists. Enter a different event name!");
        }
        else
        {
            System.out.println("Event " + "'" + eventName + "'" + " has be
en registered for " + date);
            EventCollection.eventMap.put(eventName, date);
            if(year == 0)
            {
                String date2 = month + "," + " " + day + " " + "of every
year";
                eventCollection = new EventCollection(day, month, year, da
te2, eventName);
                EventCollection.eventMap.put(eventName, date2);
            }
        }
        break;

    case 2:
        System.out.println("You are now deleting an event from your Calend
ar.");

        System.out.print("Name of event to delete: ");
        eventName = stdin.readLine();
        System.out.println(eventName);

        if(EventCollection.eventMap.isEmpty())
        {
            System.out.println("There are no events to delete in the Calen
dar.");
        }
    }
}

```

```

        Check + "" );
    }

}

break;

case 4:
    System.out.println("Your Calendar has the following " + EventCollection.eventMap.size() + " events:");
    if(EventCollection.eventMap.isEmpty())
    {
        System.out.println("Your Calendar has no registered events.");
    }
    else
    {
        EventCollection.eventMap.entrySet().forEach(entry -> {
            System.out.println("Event " + "" + entry.getKey() + "" + " is on " + entry.getValue());
        });
    }
    break;

case 5:
    System.out.println("You are now searching for an event.");
    System.out.print("Enter the name of the event to search for: ");
    eventName = stdin.readLine();
    System.out.println(eventName);
    boolean searching = true;
    while(searching)
    {
        if(EventCollection.eventMap.containsKey(eventName))
        {
            searching = false;
            System.out.println("Event " + "" + eventName + "" + " is on " + EventCollection.eventMap.get(eventName));
        }
        if(searching)
        {
            System.out.println("No event named " + "" + eventName + "" + " exists.");
        }
        break;
    }

case 6:
    EventCollection.eventMap.entrySet().forEach(entry -> {
        System.out.println(entry.getKey() + "" + entry.getValue());
    });
}

}

}

}:::.....
Event.java
:::.....
/*
 * Purpose: Data Structure and Algorithms Review Programming Assignment
 * Status: Complete and thoroughly tested
 * Last update: 1/27/23
 * Submitted: 1/27/23
 * Comment: test suite and sample run attached
 * Comment: I declare that this is entirely my own work

```

```
* @author: Antonio Rosado
* @version: 2023.01.27
*/

/**
 * Creates an event depending on user input
 *
 * @author (Antonio Rosado)
 * @version (1/24/2023)
 */
public class Event {
    protected static int day; // day int
    protected static String month; // month int
    protected static int year; // year int
    protected static String date = ""; // date string
    protected static String eventName = "";

    /**
     *
     * Creates an event with specified info
     * @param int day          day of event
     * @param int month        month of event
     * @param int year         year of event
     * @param String date      date of event
     * @param String eventName name of event
     */
    public Event(int day, String month, int year, String date, String eventName)
    {
        Event.day = day;
        Event.month = month;
        Event.year = year;
        Event.date = date;
        Event.eventName = eventName;
    }

    /**
     * Return day of event
     *
     * @return day int
     */
    public static int getDay ()
    {
        return day;
    }

    /**
     * Return month of event
     *
     * @return month int
     */
    public static String getMonth ()
    {
        return month;
    }

    /**
     * Return year of event
     *
     * @return year int
     */
    public static int getYear ()
```

```
    {
        return year;
    }

    /**
     * Return year of event
     *
     * @return year int
     */
    public static int findEvent ()
    {
        return year;
    }

    /**
     * Return date of event
     * @param int day          day of event
     * @param int month        month of event
     * @param int year         year of event
     * @return month + date + year
     */
    public static String getDate (String month, int day, int year)
    {
        String date = (month + " " + day + ", " + year + ".");
        return date;
    }

    /**
     * Return name of event
     *
     * @return day int
     */
    public static String getEventName ()
    {
        return eventName;
    }

    /**
     * Return month of event
     *
     * @return month int
     */
    public static void addEvent(String event) {
    }

    public static void addDay(int day) {
    }

    public static void addMonth(String month) {
    }

    public static void addYear(int year) {
    }

    public static void addEventName(String eventName)
    {
    }

}

:::::::::::::
EventCollection.java
:::::::::::::
```

```
/*
 * Purpose: Data Structure and Algorithms Review Programming Assignment
 * Status: Complete and thoroughly tested
 * Last update: 1/27/23
 * Submitted: 1/27/23
 * Comment: test suite and sample run attached
 * Comment: I declare that this is entirely my own work
 * @author: Antonio Rosado
 * @version: 2023.01.27
 */

import java.util.HashMap;
import java.util.Map;
import java.util.Collections;

public class EventCollection extends Event {
    static HashMap<String, String> eventMap = new HashMap<>();

    /**
     *
     * Creates an event with specified info
     * @param int day          day of event
     * @param int month        month of event
     * @param int year         year of event
     * @param String date      date of event
     * @param String eventName name of event
     */
    public EventCollection(int day, String month, int year, String date, String eventName) {
        super(day, month, year, date, eventName);
    }

    /**
     * Add event to eventList
     * @param String eventname      String eventName
     */
    public static void addEvent(String eventName)
    {
        if(eventMap != null && (!eventMap.containsKey(eventName)))
        {
            eventMap.put(eventName, date);
        }
    }

    /**
     * Remove event by specified event name
     *
     * @param String eventName eventName String
     */
    public static void removeEvent(String eventName)
    {
        if(eventMap.containsKey(eventName))
        {
            eventMap.remove(eventName);
        }
    }

    /**
     * Remove all events on specifed day
     * @param String date      date string
     */
}
```

```
*/
public static void removeEventsOnDay(String dateCheck)
{
    if(!(eventMap.isEmpty()) && (eventMap.containsValue(dateCheck)))
    {
        eventMap.values().removeAll(Collections.singleton(dateCheck));
    }
}

:::::::::::::
AssignmentSampleruns.txt
:::::::::::::

Select from the following menu:
0. Exit the program
1. Add an event
2. Delete an event
3. Delete all events on a specified day
4. Display content of Calendar
5. Search for an event

Make your menu selection now: 5
There are no events in the Calendar.

Make your menu selection now: 4
Your Calendar has no registered events.

Make your menu selection now: 3
There are no events to delete in the Calendar.

Make your menu selection now: 2
There are no events to delete in the Calendar.

Make your menu selection now: 1
You are now adding a new event to your Calendar.
Enter the name of the event: dentist appointment
Enter day of event: 3
Enter month of event: October
Enter year of event: 2022
Event "dentist appointment" has been registered for 3 October 2022.

Make your menu selection now: 1
You are now adding a new event to your Calendar.
Enter the name of the event: go shopping
Enter day of event: 14
Enter month of event: September
Enter year of event: 2023
Event "go shopping" has been registered for 14 September 2023.

Make your menu selection now: 1
You are now adding a new event to your Calendar.
Enter the name of the event: renew car registration
Enter day of event: 1
Enter month of event: September
Enter year of event: 0
Event "renew car registration" has been registered for 1 September 0.

Make your menu selection now: 1
You are now adding a new event to your Calendar.
Enter the name of the event: return library books
Enter day of event: 1
Enter month of event: September
```

Enter year of event: 2023  
Event **"return library books"** has been registered **for** 1 September 2023.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: check semester schedule  
Enter day of event: 1  
Enter month of event: September  
Enter year of event: 2023  
Event **"check semester schedule"** has been registered **for** 1 September 2023.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: pay college bill  
Enter day of event: 30  
Enter month of event: June  
Enter year of event: 0  
Event **"pay college bill"** has been registered **for** 30 June 0.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: go to the movies  
Enter day of event: 1  
Enter month of event: September  
Enter year of event: 2023  
Event **"go to the movies"** has been registered **for** 1 September 2023.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: apply **for** graduation  
Enter day of event: 2  
Enter month of event: February  
Enter year of event: 2024  
Event **"apply for graduation"** has been registered **for** 2 February 2024.

Make your menu selection now: 4  
Your Calendar has the following 8 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"return library books"** is on September 1, 2023.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: send flowers to Mom  
Enter day of event: 1  
Enter month of event: September  
Enter year of event: 0  
Event **"send flowers to Mom"** has been registered **for** 1 September 0.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: go shopping  
Event **"go shopping"** already exists. Enter a different event name!  
Enter the name of the event: pay college bill  
Event **"pay college bill"** already exists. Enter a different event name!  
Enter the name of the event: renew dog license

Enter day of event: 1  
Enter month of event: January  
Enter year of event: 0  
Event **"renew dog license"** has been registered **for** 1 January 0.

Make your menu selection now: 4  
Your Calendar has the following 10 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"return library books"** is on September 1, 2023.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"send flowers to Mom"** is on September 1 of every year.  
Event **"renew dog license"** is on January 1 of every year.

Make your menu selection now: 5  
You are now searching **for** an event.  
Enter the name of the event to search **for**: dentist appointment  
Event **"dentist appointment"** is on October 3, 2022.

Make your menu selection now: 5  
You are now searching **for** an event.  
Enter the name of the event to search **for**: doctor appointment  
Event doctor appointment is not in the Calendar

Make your menu selection now: 5  
You are now searching **for** an event.  
Enter the name of the event to search **for**: renew dog license  
Event **"renew dog license"** is on January 1 of every year.

Make your menu selection now: 5  
You are now searching **for** an event.  
Enter the name of the event to search **for**: apply **for** graduation  
Event **"apply for graduation"** is on February 2, 2024.

Make your menu selection now: 2  
You are now deleting an event from your Calendar.  
Name of event to delete: send flowers to Mom  
Event **"send flowers to Mom"** has been deleted from the Calendar.

Make your menu selection now: 4  
Your Calendar has the following 9 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"return library books"** is on September 1, 2023.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: check courses  
Enter day of event: 1  
Enter month of event: September

Enter year of event: 2024  
Event **"check courses"** has been registered **for** 1 September 2024.

Make your menu selection now: 1  
You are now adding a **new** event to your Calendar.  
Enter the name of the event: send candy to Mom  
Enter day of event: 1  
Enter month of event: September  
Enter year of event: 0  
Event **"send candy to Mom"** has been registered **for** 1 September 0.

Make your menu selection now: 4  
Your Calendar has the following 11 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"return library books"** is on September 1, 2023.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.  
Event **"check courses"** is on September 1, 2024.  
Event **"send candy to Mom"** is on September 1 of every year.

Make your menu selection now: 2  
You are now deleting an event from your Calendar.  
Name of event to delete: **return** books  
No event with **this** name in the Calendar!

Make your menu selection now: 2  
You are now deleting an event from your Calendar.  
Name of event to delete: **return** library books  
Event **"return library books"** has been deleted from the Calendar.

Make your menu selection now: 4  
Your Calendar has the following 10 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.  
Event **"check courses"** is on September 1, 2024.  
Event **"send candy to Mom"** is on September 1 of every year.

Make your menu selection now: 3  
You are now deleting all events **for** a specified day.  
Enter day: 2  
Enter month of event: September  
Enter year of event: 2023  
Should any yearly events be deleted also?(Y/N): Y  
There are no events on September 2, 2023.

Make your menu selection now: 4  
Your Calendar has the following 10 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.

Event **"renew car registration"** is on September 1 of every year.  
Event **"check semester schedule"** is on September 1, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"go to the movies"** is on September 1, 2023.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.  
Event **"check courses"** is on September 1, 2024.  
Event **"send candy to Mom"** is on September 1 of every year.

Make your menu selection now: 3  
You are now deleting all events **for** a specified day.  
Enter day: 1  
Enter month of event: September  
Enter year of event: 2023  
Should any yearly events be deleted also?(Y/N): N  
Events on September 1, 2023 excluding yearly have been deleted from the Calendar.

Make your menu selection now: 4  
Your Calendar has the following 8 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"renew car registration"** is on September 1 of every year.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.  
Event **"check courses"** is on September 1, 2024.  
Event **"send candy to Mom"** is on September 1 of every year.

Make your menu selection now: 3  
You are now deleting all events **for** a specified day.  
Enter day: 1  
Enter month of event: September  
Enter year of event: 2024  
Should any yearly events be deleted also?(Y/N): Y  
Events on September 1, 2024 including yearly have been deleted from the Calendar.

Make your menu selection now: 4  
Your Calendar has the following 5 events:  
Event **"dentist appointment"** is on October 3, 2022.  
Event **"go shopping"** is on September 14, 2023.  
Event **"pay college bill"** is on June 30 of every year.  
Event **"apply for graduation"** is on February 2, 2024.  
Event **"renew dog license"** is on January 1 of every year.

Make your menu selection now: 0  
Exiting program...good byeMake your menu selection now:  
0. Exit the program  
1. Add an event  
2. Delete an event  
3. Delete all events on a specified day  
4. Display content of calendar  
5. Search **for** an event  
You chose: You are now searching **for** an event.  
Enter the name of the event to search **for**: 4  
Make your menu selection now:  
0. Exit the program  
1. Add an event  
2. Delete an event  
3. Delete all events on a specified day

```
4. Display content of calendar
5. Search for an event
You chose: You are now searching for an event.
Enter the name of the event to search for: 4
Make your menu selection now:
0. Exit the program
1. Add an event
2. Delete an event
3. Delete all events on a specified day
4. Display content of calendar
5. Search for an event
You chose: You are now searching for an event.
Enter the name of the event to search for: 4
Make your menu selection now:
0. Exit the program
1. Add an event
2. Delete an event
3. Delete all events on a specified day
4. Display content of calendar
5. Search for an event
You chose: You are now searching for an event.
Enter the name of the event to search for: 4
```