```cpp
/*
 * myDate.h
 *
 *  Created on: Sep 18, 2016
 *      Author: Kenny Do
 */

#ifndef MYDATE_H_
#define MYDATE_H_

class myDate {
    /**
     * Stores the date
     */
    int month;

    /**
     * Stores the day
     */
    int day;

    /**
     * Stores the year
     */
    int year;

    /**
     * Sets the default date
     */
    void defaultDate();

public:
    /**
     * Default contructor
     */
    myDate();

    /**
     * Constructor that takes in the month, day, and year
     */
    myDate(int M, int D, int Y);

    /**
     * Displays the date
     */
    void display();

    /**
     * Increment the date by N
     */
    void incrDate(int N);

    /**
     * Decrement the date by N
     */
    void decrDate(int N);

    /**
     * Calculates the days between D and this date
     */
    int daysBetween(myDate D);

    /**
     * Returns the month
     */
    int getMonth() const;
```

```cpp
    /**
     * Returns the day
     */
    int getDay() const;

    /**
     * Returns the year
     */
    int getYear() const;

    /**
     * Returns the days between this date and the start of the year
     */
    int getYearOffset() const;

    /**
     * Returns the Julian number of this date
     */
    double getJulianDate() const;

    /**
     * Returns a myDate object that is calculated from the julian number
     */
    static myDate returnGregorian(int julian);

    /**
     * Returns a day between d1 and d2
     */
    static myDate getRandomDayBetween(myDate d1, myDate d2);

    /**
     * Returns the display as a cstring
     */
    const char * toString();

    /**
     * Overload the greater than
     */
    bool operator >(const myDate & date);

    /**
     * Overload the less than
     */
    bool operator <(const myDate & date);

    /**
     * Overload the greater than or equal to
     */
    bool operator >=(const myDate & date);

    /**
     * Overload the less than or equal to
     */
    bool operator <=(const myDate & date);

    /**
     * Overload the equals
     */
    bool operator ==(const myDate & date);

    /**
     * Overload the not equals
     */
    bool operator !=(const myDate & date);
};
```

```
#endif /* MYDATE_H_ */
```