

Course Project Documentation

CS101 Project (2014-15)

## **INDIAN NATIONAL CALENDAR**

TEAM : 471

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## **1. Introduction:**

Our project is aimed to bring awareness among people about the Indian National calendar. Most of us don't know about our National calendar. In this project we made both types of calendars.

The Indian national calendar, sometimes called the Saka calendar, is the official civil calendar in use in India. It is used, alongside the Gregorian calendar, by The Gazette of India, in news broadcasts by All India Radio and in calendars and communications issued by the Government of India. The calendar was introduced by the Calendar Reform Committee in 1957.

Usage started officially at Chaitra 1, 1879, Saka Era, or March 22, 1957. However, government officials seem to largely ignore the New Year's Day of this calendar in favour of the religious calendar. It was a futile exercise, as no one accepted it for either religious or official purposes

## **2. Problem Statement:**

This project contains one user interface which displays the calendar. We switch between months by giving input from keyboard. Once when we come to console we can add events on particular day we can view events of a particular day.

We can switch between the calendars by giving input from the keyboard. Starting from the year 2015 it will give all the selected years. This year corresponds to year 1937 in Indian national calendar.

This project also contains a gregorian converter which takes gregorian date as input and gives the corresponding date of Indian National calendar. We can use this converter by giving input from keyboard.

### **3: Requirements**

#### **A) Software Requirements**

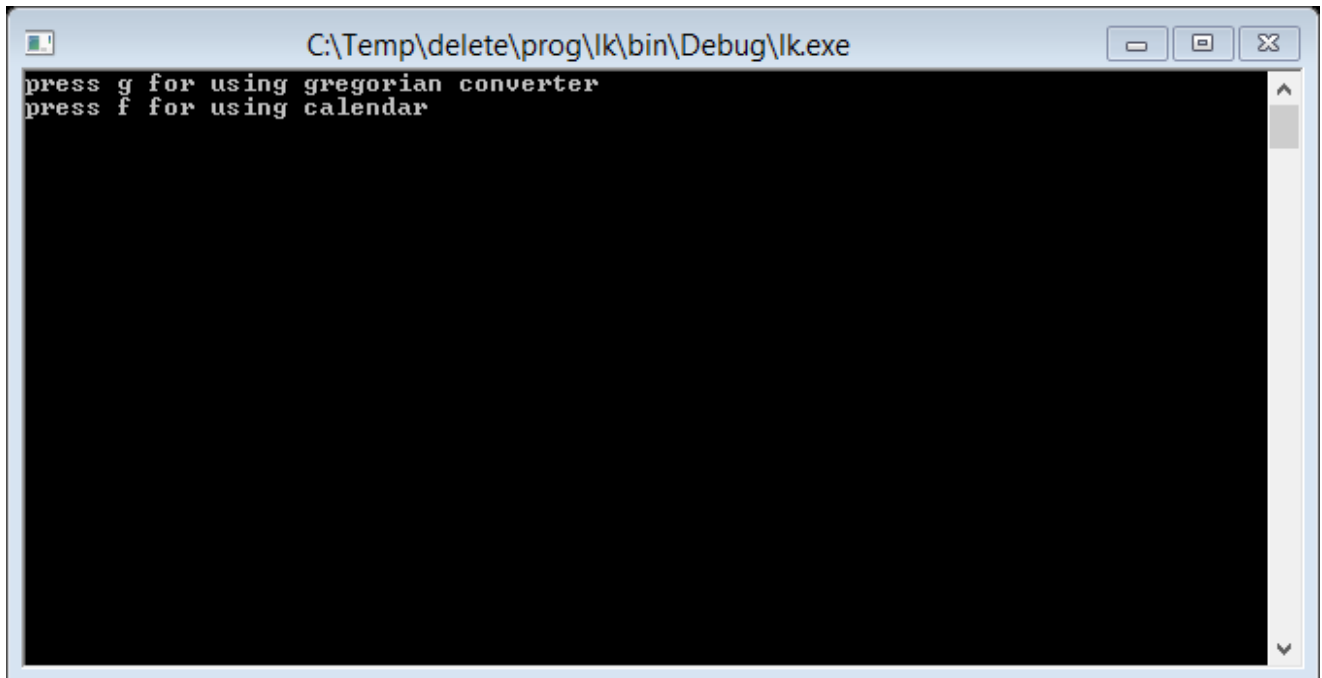
1. Code blocks
2. Graphics.h library
3. txt file which contains all the events

Only exe file of our project and text file are enough to use the application.

To work on the code environment should contain graphics.h,cstdio,fstream libraries.

#### 4. Implementation: A) Functionality:

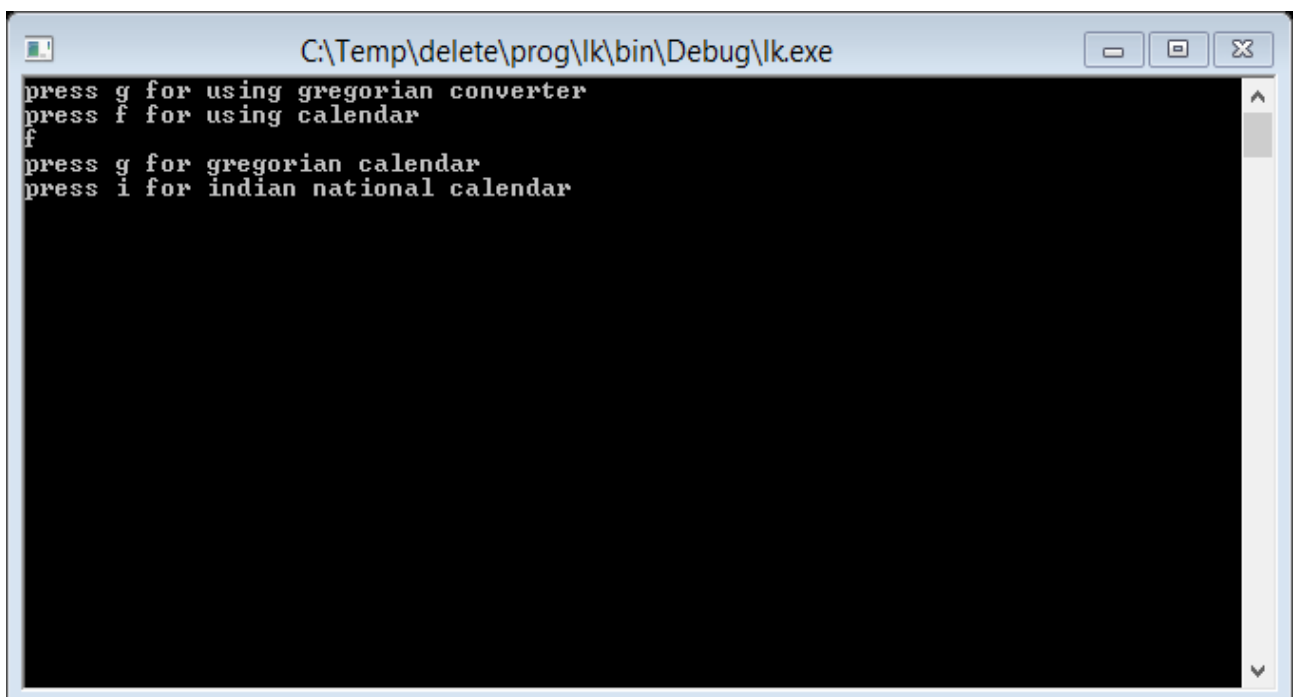
##### a) Switching between and calendar and convertor:



```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
```

if we press f then the result will be in the following manner.

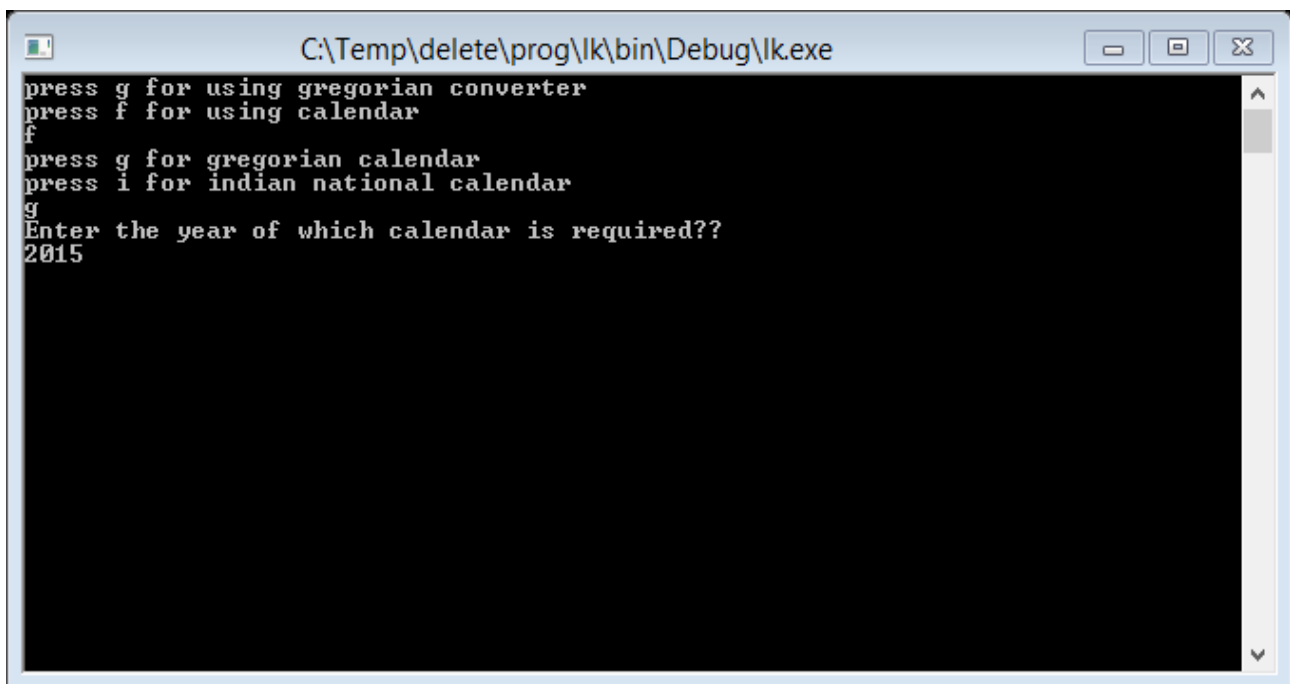
##### b) Switching between two calendars:



```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
f
press g for gregorian calendar
press i for indian national calendar
```

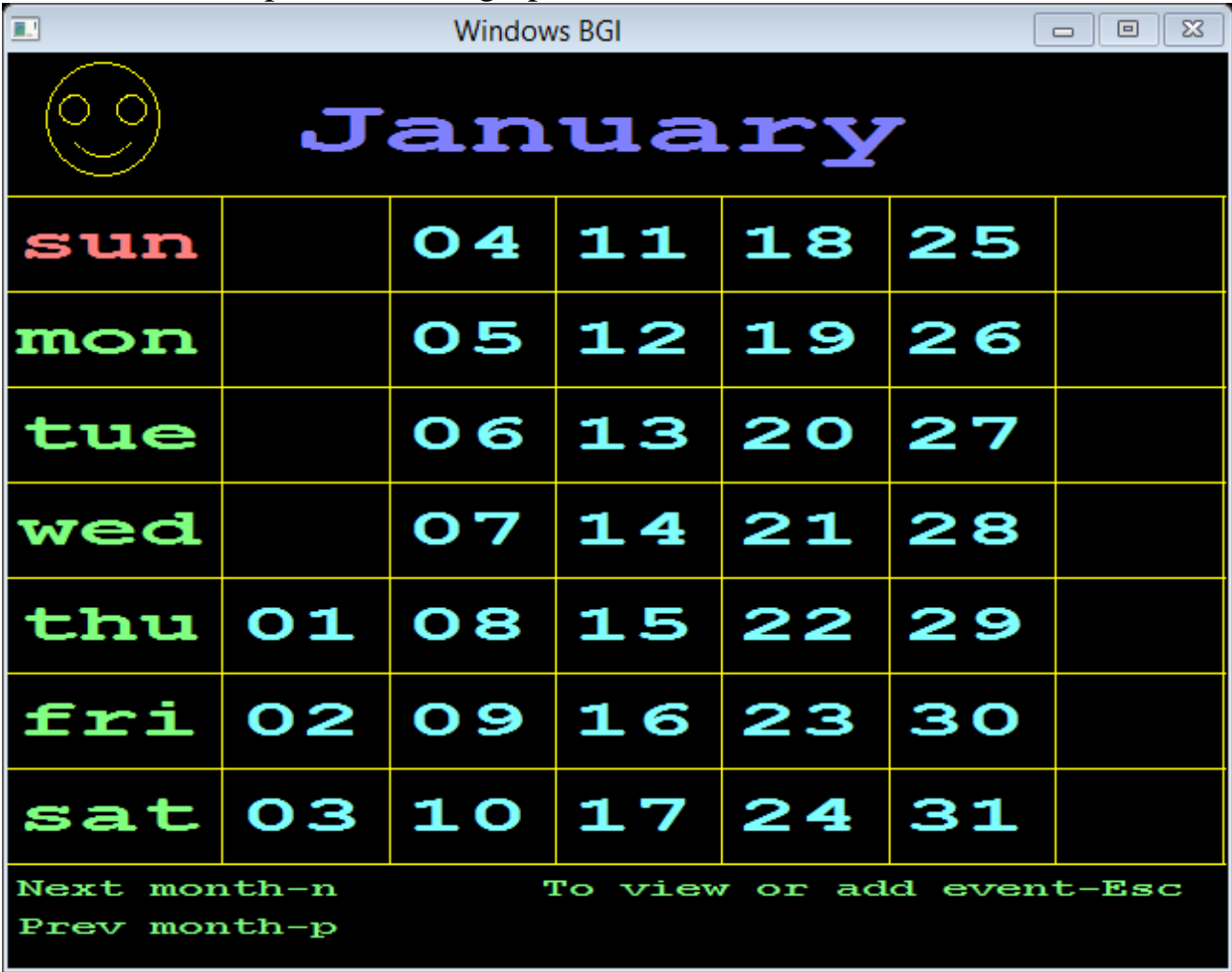
you can select your desired calendar .After selecting it will be in the following manner.

**Required year:**

A screenshot of a Windows command prompt window. The title bar shows the file path "C:\Temp\delete\prog\lk\bin\Debug\lk.exe". The command prompt displays the following text: "press g for using gregorian converter", "press f for using calendar", "f", "press g for gregorian calendar", "press i for indian national calendar", "g", "Enter the year of which calendar is required??", and "2015". The text is in a monospaced font on a black background. There is a vertical scrollbar on the right side of the command prompt area.

```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
f
press g for gregorian calendar
press i for indian national calendar
g
Enter the year of which calendar is required??
2015
```

Calendar will be printed in the graphics window.



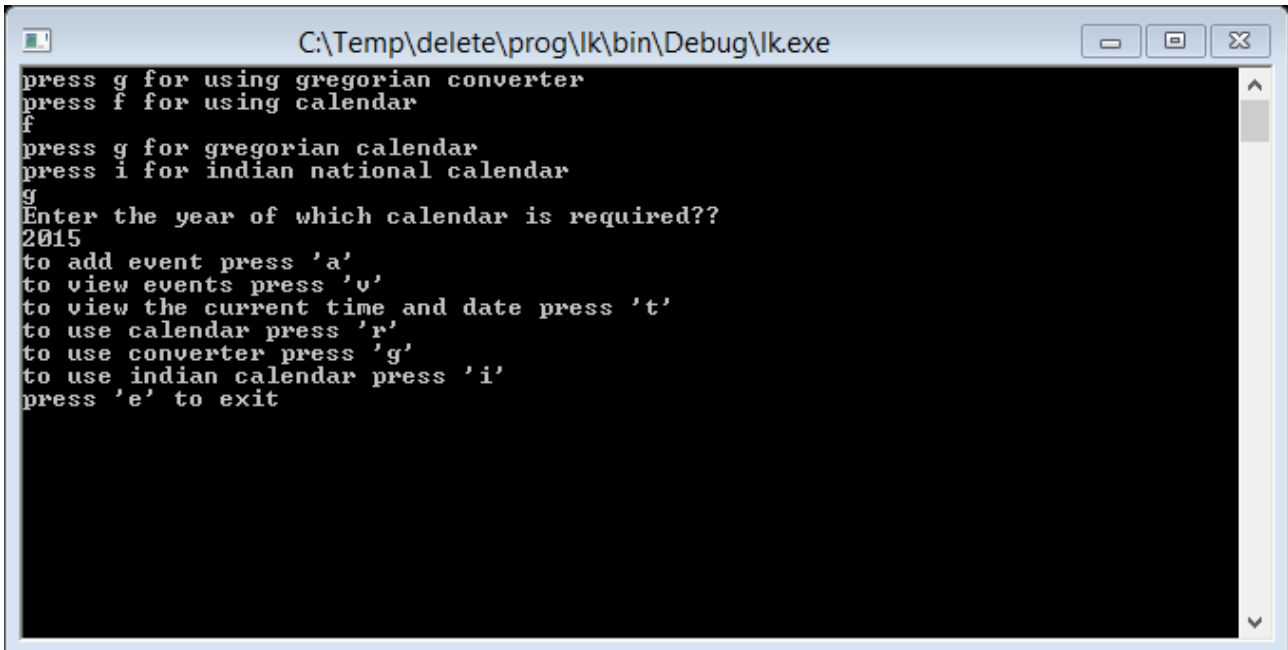
Now you can input from the keyboard to change the months in the year.

n:next month

p:previous month

Esc: To add or view event

After pressing esc move to console and it displays in the following manner.



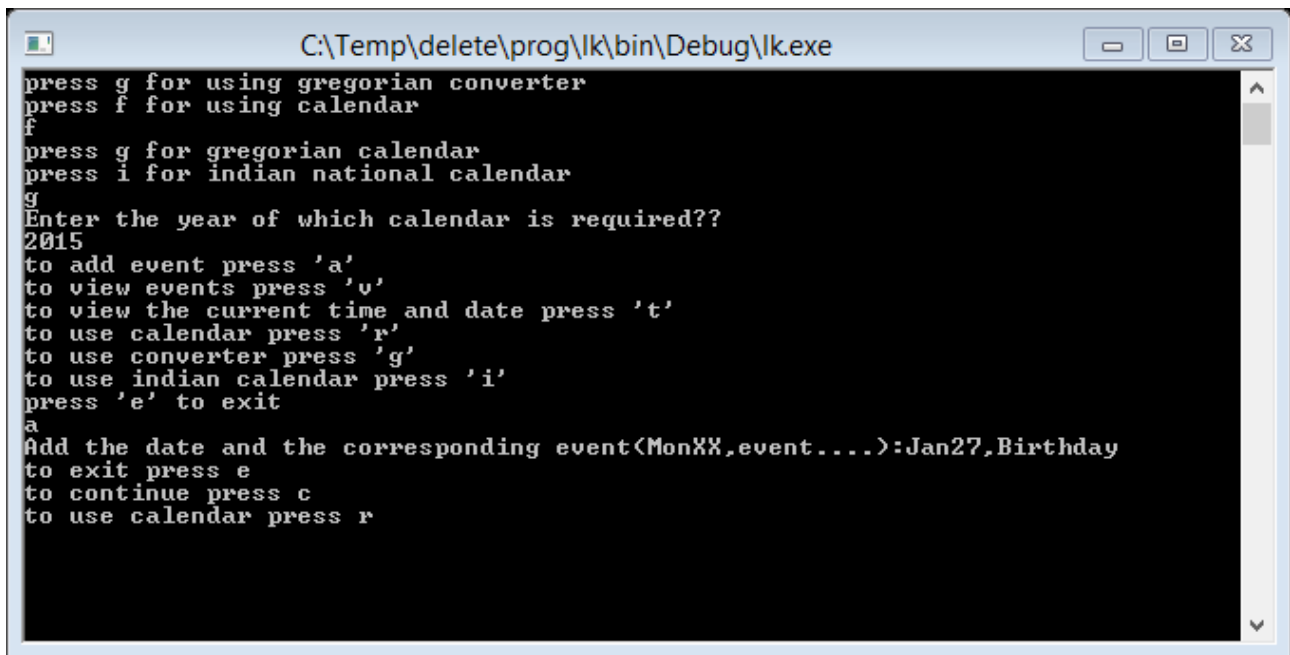
```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
f
press g for gregorian calendar
press i for indian national calendar
g
Enter the year of which calendar is required??
2015
to add event press 'a'
to view events press 'v'
to view the current time and date press 't'
to use calendar press 'r'
to use converter press 'g'
to use indian calendar press 'i'
press 'e' to exit
```

Select the function which you want to use. We can add, view events and we can get the date and time of the desktop.

If we press 'a' then the result will be in the following manner.

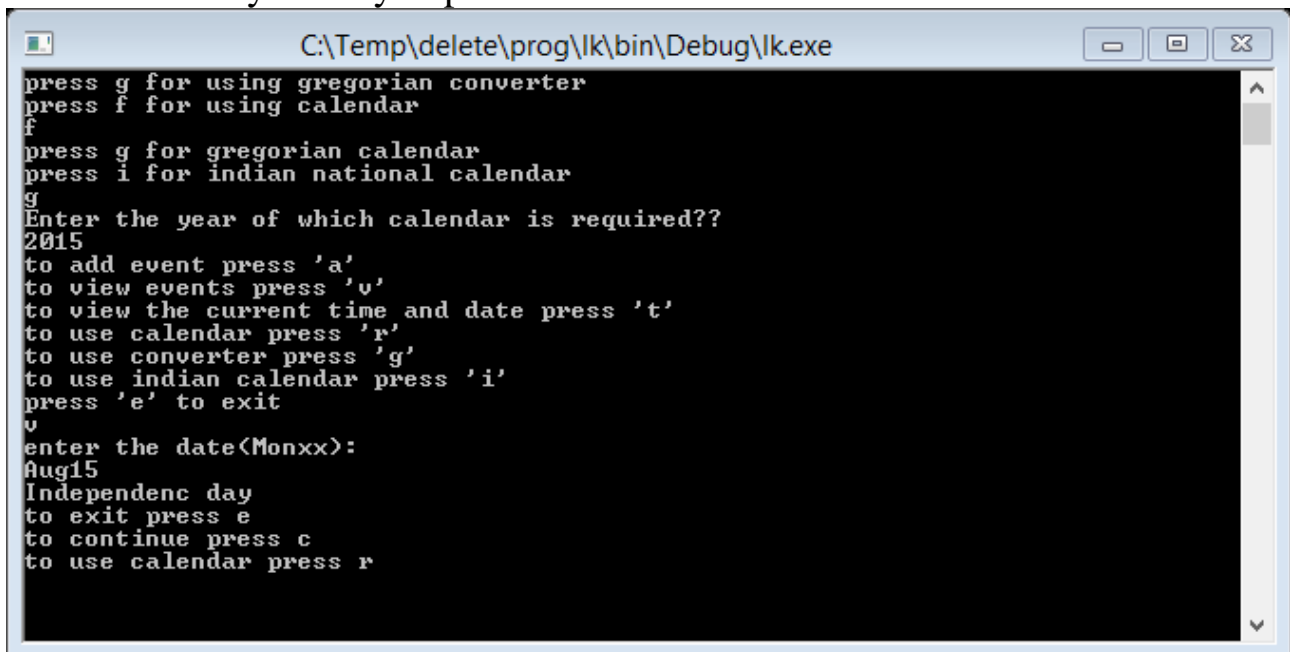
You should enter the date and the event in the default manner.





```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
f
press g for gregorian calendar
press i for indian national calendar
g
Enter the year of which calendar is required??
2015
to add event press 'a'
to view events press 'v'
to view the current time and date press 't'
to use calendar press 'r'
to use converter press 'g'
to use indian calendar press 'i'
press 'e' to exit
a
Add the date and the corresponding event(MonXX,event....):Jan27,Birthday
to exit press e
to continue press c
to use calendar press r
```

In the same way when you perss 'v'.



```
C:\Temp\delete\prog\lk\bin\Debug\lk.exe
press g for using gregorian converter
press f for using calendar
f
press g for gregorian calendar
press i for indian national calendar
g
Enter the year of which calendar is required??
2015
to add event press 'a'
to view events press 'v'
to view the current time and date press 't'
to use calendar press 'r'
to use converter press 'g'
to use indian calendar press 'i'
press 'e' to exit
v
enter the date(Monxx):
Aug15
Independenc day
to exit press e
to continue press c
to use calendar press r
```

Indian National calendar will be in the following manner.

S

Windows BGI						
 <b>Caitra</b>						
Ravi	01	08	15	22	29	
Soma	02	09	16	23	30	
Mangal	03	10	17	24		
Budha	04	11	18	25		
Guru	05	12	19	26		
Sukra	06	13	20	27		
Sani	07	14	21	28		
Next month-n                      To view or add event-Esc Prev month-p						

### 5)Testing the project:

- Type a random and verify with the original calendar.
- Enter the events and check wether they are stored in the text file or not.
- In the same way for converter give some random date check the result manually.

## **6)Discussion of System:**

### **A) What not worked as per plan?**

we are unable to run the process in background.

So our thought of sending notifications as desktop popups is also failed.

### **B) What we added more than discussed in SRS?**

1)In SRS we planned to do only Indian National Calendar but we also included Gregorian analogue to it.

2)We also added converter which converts date from Gregorian to Indian National Calendar.

3)Moreover you switch from one calendar to the other.

### **(C) Changes made in plan:**

1.Gtkmm installation:

Initially we thought of using gtkmm to create the graphical interface. But later shifted to graphics.h library

Probable Reason:

We are unable to install gtkmm in code block

## 7) Future Work:

1. In our current implementation, the search of the events are done corresponding to the date given by the user. It can be developed such that the inputs of search will also include events not solely based on dates.
2. The days in the calendar and the days that user has assigned any event are now shown in same texture. It can be modified such a way that the important dates, the user had assigned some event can be highlighted by specific colours which makes the calendar more meaningful for the user to have it.
3. We had tried to run the code in the background but failed to do so. It currently works in "VIEW MODEL>>RUN" mode. By using XAML, we can design such that it can run in background on its own i.e., "MODEL>>RUN IN BAKGROUND>>VIEW" mode.
4. In our submission, we had failed to extract the pop up notifications from the code despite of many trails in vain. It can be achieved by using XAML as stated above as it ensures the code run in background and give notifications by the time scheduled by the user
5. It can be developed into an android app such that it can be synced with various devices of the user which will have an "USER ID- PASSWORD" interface.
6. In current project, we had implemented the conversion of of the Gregorian calendar into Indian National Calendar. It can be achieved vice-versa also.

## 8) Conclusion:

By this project one can able to learn about Indian national calendar by comparing it with Gregorian calendar. One can use this record his events and view them whenever he events.

## 9)References:

- 1)<http://www.cplusplus.com/reference/ctime/>



