## Assignment No.15 Topic: Beyond Syllabus

## Problem Statement:

Write a program that uses the Gregorian Calendar class to display a calendar for the current month, the current date should be marked with \*

**CODE:**

import java.text.DateFormatSymbols;

import java.util.\*;

public class CalendarTest1

{

public static void main(String[] args)

{

System.out.printf("%s\n",Locale.getDefault());

//Locale.setDefault(Locale.ITALY);

// [1] construct d as current date

GregorianCalendar d = new GregorianCalendar();

// [2] Fetch from d the values for current dd and mm

int today = d.get(Calendar.DAY\_OF\_MONTH);

int month = d.get(Calendar.MONTH);

// [3] set d to start date of the month

d.set(Calendar.DAY\_OF\_MONTH, 1);

/\*\* [4] Fetch from d the value of the weekday (Sun to Sat) corresponding to the

start day (dd) of the month \*/

int weekday = d.get(Calendar.DAY\_OF\_WEEK);

// [5] get first day of week (Sunday in the U.S.) in that locale

int firstDayOfWeek = d.getFirstDayOfWeek();

// [6] determine the required indentation for the first line

int indent = 0;

while (weekday != firstDayOfWeek)

{

indent++;

d.add(Calendar.DAY\_OF\_MONTH, -1);

weekday = d.get(Calendar.DAY\_OF\_WEEK);

}

// [7] print weekday names

String[] weekdayNames = new DateFormatSymbols().getShortWeekdays();

do

{

System.out.printf("%4s", weekdayNames[weekday]);

d.add(Calendar.DAY\_OF\_MONTH, 1);

weekday = d.get(Calendar.DAY\_OF\_WEEK);

}

while (weekday != firstDayOfWeek);

System.out.println();

// [8] Printing the spaces

for (int i = 1; i <= indent; i++)

System.out.print(" ");

// [9] set d to first day of the month and then print each date till month changes

d.set(Calendar.DAY\_OF\_MONTH, 1);

// till month doesn't change

do

{

// print day

int day = d.get(Calendar.DAY\_OF\_MONTH);

System.out.printf("%3d", day);

// mark current day with \*

if (day == today) System.out.print("\*");

else System.out.print(" ");

// advance d to the next day

d.add(Calendar.DAY\_OF\_MONTH, 1);

weekday = d.get(Calendar.DAY\_OF\_WEEK);

// start a new line at the start of the week

if (weekday == firstDayOfWeek) System.out.println();

}

while (d.get(Calendar.MONTH) == month);

// the loop exits when d is day 1 of the next month

// print final end of line if necessary

if (weekday != firstDayOfWeek) System.out.println();

}

}**OUTPUT:**

