package calendar;

  public class Calendar {

    public static void main(String[] args) {

        java.util.Scanner sc = new java.util.Scanner(System.in);

        System.out.print("Input year: ");

        int year = sc.nextInt();

        System.out.println("\n[1] Monday\n"

                + "[2] Tuesday\n"

                + "[3] Wednesday\n"

                + "[4] Thursday\n"

                + "[5] Friday\n"

                + "[6] Saturday\n"

                + "[7] Sunday");

        System.out.print("Input weekday of start of year: ");

        int startDayOfMonth = sc.nextInt();

        int space = startDayOfMonth;

        String[] months = {

                "",

                "January", "February", "March",

                "April", "May", "June",

                "July", "August", "September",

                "October", "November", "December"

            };

            int[] days = {

                0, 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31

            };

            for (int M = 1; M <= 12; M++) {

            if  ((((year % 4 == 0) && (year % 100 != 0)) ||  (year % 400 == 0)) && M == 2)

                days[M] = 29;

            System.out.println("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_");

            System.out.println("          "+ months[M] + " " + year);

            System.out.println("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_");

            System.out.println("  Sun  Mon  Tue  Wed  Thu  Fri  Sat  ");

               space = (days[M-1] + space)%7;

            for (int i = 0; i < space; i++)

                System.out.print("     ");

            for (int i = 1; i <= days[M]; i++) {

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

                if (((i + space) % 7 == 0) || (i == days[M])) System.out.println();

            }

            System.out.println();

        }

    }

}