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1  #include <stdio.h>
2
3  int firstday(int Year)
4  {
5      int day;
6      day = (((Year - 1) * 365) + ((Year - 1) / 4) - ((Year - 1) / 100) + ((Year) / 400) + 1) % 7;
7      return day;
8  }
9
10 int Calendar_app(int Year)
11 {
12     int m,i,j,k,date;
13     int day_one;
14     char Months[12]={"January","February","March","April","May","June","July","August",
15 "September","October","November","December"};
16     int tot_days[]={31,28,31,30,31,30,31,31,30,31,30,31};
17     if(Year%4==0)
18         tot_days[1]=29;
19
20     day_one=firstday(Year);
21     for(m=0;m<12;m++)
22     {
23         printf("\n-----");
24         printf("\n\t\t%s,%d\n",Months[m],Year);
25         printf("-----\n");
26         printf("Sun\tMon\tTues\tWed\tThur\tFri\tSat\n");
27         date=1;
28         for(k=1;k<=day_one;k++)
29         {
30             printf("\t");
31         }
32         for(i=1;i<=6;i++)
33         {
34             for(j=day_one;j<=6;j++)
35             {
36                 printf("%d\t",date);
37                 date+=1;
38                 if(date>tot_days[m])
39                     break;
40             }
41             if(date>tot_days[m])
42                 break;
43             printf("\n");
44             day_one=0;
45         }
46         day_one=j+1;
47     }
48 }
49
50 int Month Year(int year,int month)
51 {
52     int m,i,j,k;
53     int day1,date,temp;
54     char Months[12]={"January","February","March","April","May","June","July","August",
55 "September","October","November","December"};
56     int tot_days[]={31,28,31,30,31,30,31,31,30,31,30,31};
57     if(year%4==0)
58         tot_days[1]=29;
59     for(m=0;m<12;m++)
60     {
61         printf("\n-----");
62         printf("\n\t\t%s,%d\n",Months[month-1],year);
63         printf("-----\n");
64         printf("Sun\tMon\tTues\tWed\tThur\tFri\tSat\n");
65     }
66     temp=firstday(year);
67     for(i=0;i<month-1;i++)
68     {
69         temp=temp+tot_days[i];
70     }
71     day1=temp%7;
72     date=1;
73     for(k=1;k<=day1;k++)
74     {
75         printf("\t");
76     }
77     for(i=1;i<=6;i++)
78     {
79         for(j=day1;j<=6;j++)
80         {
81             printf("%d\t",date);
82             date+=1;
83             if(date>tot_days[month-1])
84                 break;

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85         day1=0;
86         if(date>tot_days[month-1])
87             {break;}
88         printf("\n");
89     }
90 }
91
92 int main()
93 {     int choice=1;
94     while(choice!=3)
95     {
96         printf("\n\nEnter 1 for Year-wise calendar\n");
97         printf("Enter 2 for Month-wise calendar\n");
98         printf("Enter 3 to exit application\n");
99         printf("Enter desired choice:");
100        scanf("%d",&choice);
101
102        switch(choice)
103        {
104            case 1:
105            {
106                int year;
107                printf("Enter the Year:");
108                scanf("%d",&year);
109                Calendar_app(year);
110                break;
111            }
112            case 2:
113            {
114                int year,month;
115                printf("Enter year of your choice:");
116                scanf("%d",&year);
117                printf("Enter month of your choice:");
118                scanf("%d",&month);
119                Month Year(year,month);
120                break;
121            }
122            case 3:
123            {
124                break;
125            }
126            default:
127            {
128                printf("Invalid choice, please enter valid choice.");
129            }
130        }
131    }
132
133    return 0;
134 }
135

```