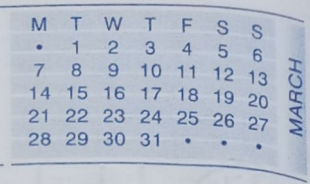
(Array of structures.)

01-03-2011

(37.) Write a program to calculate the subject-wise and student-wise totals and store them as a part of the structure.

Appointments Meetings

```
struct marks
{
   int sub1;
   int sub2;
   int sub3;
   int total;
};
main()
{
  int i;
  struct marks student[3] = { {45, 67, 81, 0},
                              {75, 53, 69, 0},
                              {57, 36, 71, 0}
                            };
  struct marks total;
  for(i=0; i<=2; i++)
    {
       student[i].total = student[i].sub1 +
                          student[i].sub2 +
                          student[i].sub3;
       total.sub1 = total.sub1 + student[i].sub1;
       total.sub2 = total.sub2 + student[i].sub2;
       total.sub3 = total.sub3 + student[i].sub3;
       total.total = total.total + student[i].total;
    }
printf(" STUDENT  TOTAL \n\n");
```



Appointments ⇔ Meetings

```
for (i=0; i<=2; i++)
    printf (" student [%d]   %d \n", i+1, student[i].total);
printf(" \n SUBJECT   TOTAL \n\n");
printf("%s   %d \n %s   %d \n %s   %d \n",
                " subject 1 ", total.sub1,
                " subject 2 ", total.sub2,
                " subject 3 ", total.sub3);
printf(" \n Grand Total = %d \n", total.total);
}
```

OUTPUT:

STUDENT	TOTAL
student[1]	193
student[2]	197
student[3]	164

SUBJECT	TOTAL
subject 1	177
Subject 2	156
subject 3	221

Grand Total = 554