

```

! Keywords: Knapsack Model / Production / Sales / Music;
! We want to decide how to place 7 songs on a record album so as to
! maximize the number of songs on the "short" side of the album. The
! short side must contain no more than half the total music time. The
! times by song are:
!
!      SONG:    1   2   3   4   5   6   7
!      TIME:    2   5   2   2   7   2   2
!
! Y<i> = 1 if song <i> is assigned to short side, else 1
!
MAX    Y1 +   Y2 +   Y3 +   Y4 +   Y5 +   Y6 +   Y7
SUBJECT TO
        2 Y1 + 5 Y2 + 2 Y3 + 2 Y4 + 7 Y5 + 2 Y6 + 2 Y7 <= 11
END
!
! The Y's must be 0/1:
INT 7
!
! Songs 1, 3, 4, 6, and 7 should appear on the short side.

```