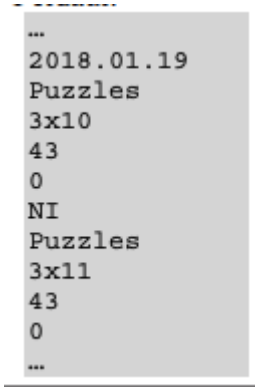
## TV Series

There are TV series enthusiasts who continuously follow their favorite shows. One person, a fan of English-language series, kept a record of their favorite series over an eight-month period.

The "lista.txt" file contains information about the airing date of the series the fan liked, the English title of the series, the season and episode number, the episode's duration in minutes, and a marker indicating whether the list creator has already watched that episode. These pieces of information are listed one after another in separate lines. The file contains data for fewer than 400 episodes, with 5 lines per episode.




In the example provided, it shows that the 10th episode of the series titled "Puzzles" from the 3rd season aired on January 19, 2018. The episode has a duration of 43 minutes, and the list creator has not watched it yet.

- The dates are always recorded in the "yyyy.mm.dd" format. There are some series episodes for which, at the time of recording the list, the airing dates were not known. For these episodes, instead of a date, the abbreviation "NI" is used.
- The season number is recorded without leading zeros, and the episode number is always recorded with two digits. An "x" separates the season and episode numbers from each other. Additionally, episodes within the same series always have the same duration.
- The last piece of data related to the episode is either "0" or "1." The digit "1" indicates that the list creator has already watched that particular episode, while "0" signifies that they have not watched it yet.

Create a program to process the data in the 'lista.txt' file! Save the source code of the program under the name 'series'! (You don't need to check the correctness or validity of the data provided by the user; you can assume that the available data conforms to the description.)

1. Read and store the contents of the 'lista.txt' file!
2. Display on the screen how many episodes in the file have known airing dates!
3. Determine what percentage of the episodes in the file have been watched by the person who recorded the list! Display the percentage value on the screen with two decimal places, as shown in the sample!
4. Calculate the total time spent by the person watching episodes! Provide the result in the format of days, hours, and minutes as shown in the sample!
5. Request the user to enter a date in the format 'yyyy.mm.dd'! Determine which episodes released until the given date have not been watched yet, including episodes aired on that day! For episodes that meet the criteria, display on the screen, separated by a tab, the season and episode numbers, as well as the series title as shown in the sample!
6. Create the function to determine the day of the week based on the algorithm below! The function's name should be 'DayOfWeek.' After providing the year, month, and day, the function should return, as text, which day of the week it was. (When dividing

two integers, 'a div b' represents the quotient, and 'a mod b' represents the remainder, for example, 17 div 7 = 2 and 17 mod 7 = 3.)

```
Függvény hetnapja(ev, ho, nap : Egész) : Szöveg
  napok: Tömb(0..6: Szöveg)= ("v", "h", "k", "sze",
                              "cs", "p", "szo")
  honapok: Tömb(0..11: Egész)= (0, 3, 2, 5, 0, 3, 5, 1, 4, 6, 2, 4)
  Ha ho < 3 akkor ev := ev -1
  hetnapja := napok[(ev + ev div 4 - ev div 100 +
                     ev div 400 + honapok[ho-1] + nap) mod 7]
Függvény vége
```

7. Request the user to enter a day in the abbreviated form as seen in the previous task! Represent the days with one (h, k, p, v), two (cs), or three (sze, szo) characters! Determine which series from the file are being broadcast on that day! Display the series names on the screen as shown in the sample! If no series are broadcast on that day, display the message 'No series are scheduled for this day.
8. Determine, for each series, the total duration of episodes and the number of episodes! Take into account episodes without broadcast dates in the calculation! You can use the fact that the data for a series' episodes are consecutive in the source file. Write the list to the 'summa.txt' file! In one line of the file, include the series title, the total duration of episodes in minutes for that series, and the number of episodes, separated by spaces.