

Saving the Calendar  
Dictionary to a File

The Calendar program dictionary has (month, day, year) tuples for keys and lists of strings as values. We will store this data as lines

date note

When we read a line of the file, we will separate it into date and note fields. As usual, if the date is not yet a key of the dictionary we will add it with the code `D[date] = [note]`; if the date is a key we will add it with `D[date].append(note)`

The only tricky thing is how to separate the date from the note. If we use a space, as in

```
2 16 2018 My birthday!
```

then `line.split( )` becomes a mess:

```
[ "2", "16", "2018", "My", "birthday!" ]
```

It is possible to build the date and note from this list, but not pleasant.

A better idea is to use a separator between the date and note fields. We can then split the line on this separator and get the note and date in one step. The separator should be something that we are confident won't appear in any date or note.

What will make a good separator?

A. A hashtag symbol "#"

B. An ampersand "&"

C. Three bangs "!!!"

D. Something awkward, like \$SeP\$

Let's suppose we go with `$SeP$` as the separator. A line of the file will look like

```
2 16 2018$SeP$My birthday!
```

```
line.split( "$SeP$" ) will then be the pair  
[ "2 16 2018", "My birthday!" ]
```

The second field is exactly the note; we can split the first field into three strings that give the month, day, and year.