Flat File Structure

Flat files contain tabular data in plain text format with one data record per line and each record or line having one or more fields. These fields are separated by delimiters, like commas, tabs, or colons.

Advantages of flat files include:

- They're text files and therefore human readable.
- Lightweight.
- Simple to understand.
- Software that can read/write text files is ubiquitous, like text editors.
- Great for small datasets.

Disadvantages of flat files, in comparison to relational databases, for example, include:
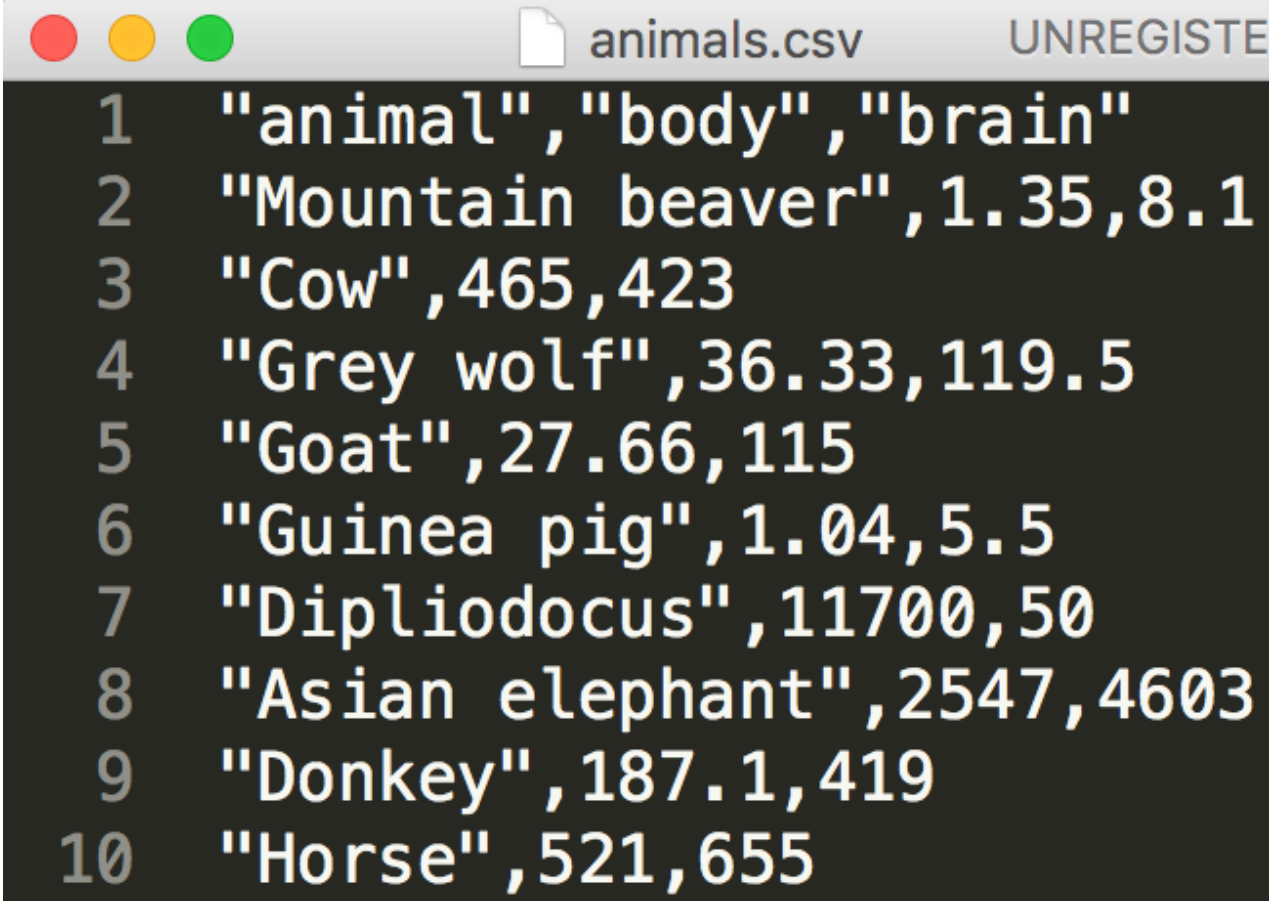
- Lack of standards.
- Data redundancy.
- Sharing data can be cumbersome.

Quiz

Are the files pictured below flat files? Match yes or no to each file number in the following quiz.

File #1: animals.csv

File #2: animals.tsv

```
 1   animal body brain
 2   Mountain beaver 1.35 8.1
 3   Cow 465 423
 4   Grey wolf 36.33 119.5
 5   Goat 27.66 115
 6   Guinea pig 1.04 5.5
 7   Dipliodocus 11700 50
 8   Asian elephant 2547 4603
 9   Donkey 187.1 419
10   Horse 521 655
```

File #3: animals.txt

```
                      animals.txt                    UNREGIST
 1   Animal Body and Brain Weights
 2   The average mountain beaver's body
     weighs 1.35 kg and its brain weights
     8.1 g.
 3   The average cow's body weighs 465 kg
     and its brain weighs 423 g.
 4   The average grey wolf's body weighs
     36.33 kg and its brain weighs 119.5 g.
```

File #4: animals.txt

```
 1   animal,body,brain
 2   Mountain beaver,1.35,8.1
 3   Cow,465,423
 4   Grey wolf,36.33,119.5
 5   Goat,27.66,115
 6   Guinea pig,1.04,5.5
 7   Dipliodocus,11700,50
 8   Asian elephant,2547,4603
 9   Donkey,187.1,419
10   Horse,521,655
```
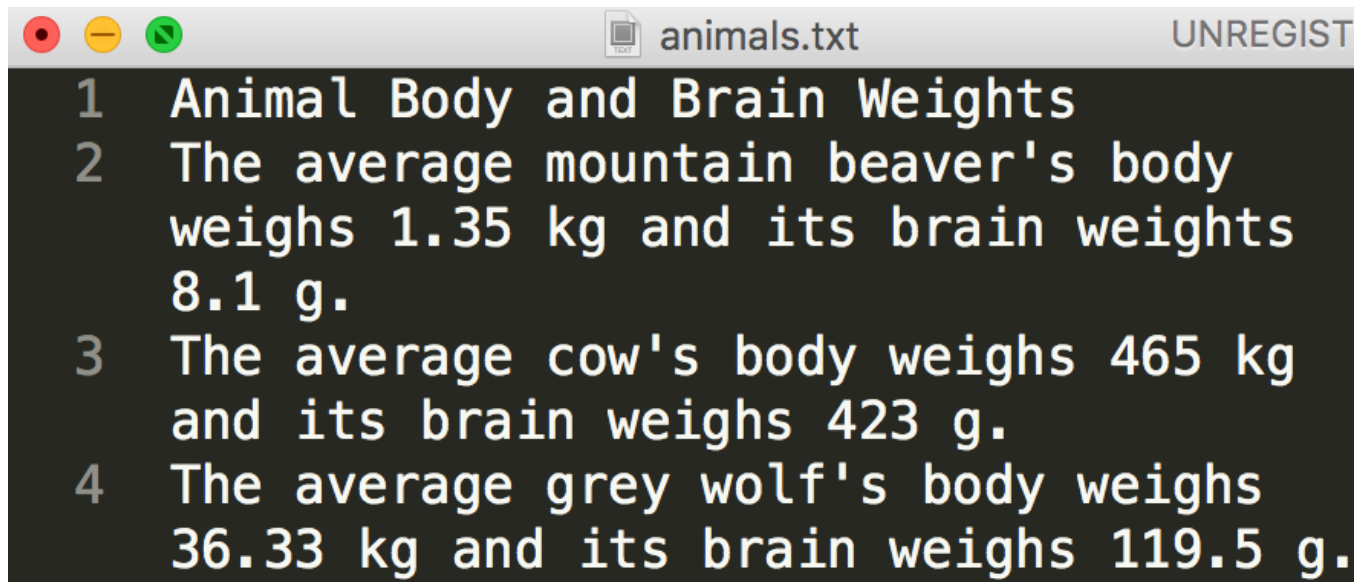
QUIZ QUESTION

Are the files pictured above flat files?

No	No	Yes	No

FILE	FLAT FILE?
#1: animals.csv	Yes
#2: animals.tsv	Yes

Flat File Structure

#4 animals.txt	Yes

SUBMIT

More Information

- **Professor Excel: XML & ZIP: Explore Your Excel Workbooks File Structure**
- **Cornell: Relational Databases - Not your Father's Flat Files**

NEXT