Tables

Prof. Abby Stylianou

Logistics

- Homework 1 due Thursday
- Update to Syllabus – late policy (10% deduction per assignment for each day late)
- Post questions / discuss on Piazza
- Office hours tomorrow (1:30-2:30 in Ritter 107)

Review from Last Class

- Lists + list comprehension

- Control Structures
  - for loops
  - while loops
  - if / else
  - if / elif / else
  - Loop control statements
    - Break, continue, pass

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Name	**Code**	**Area (m2)**
California	CA	163696
Nevada	NV	110567

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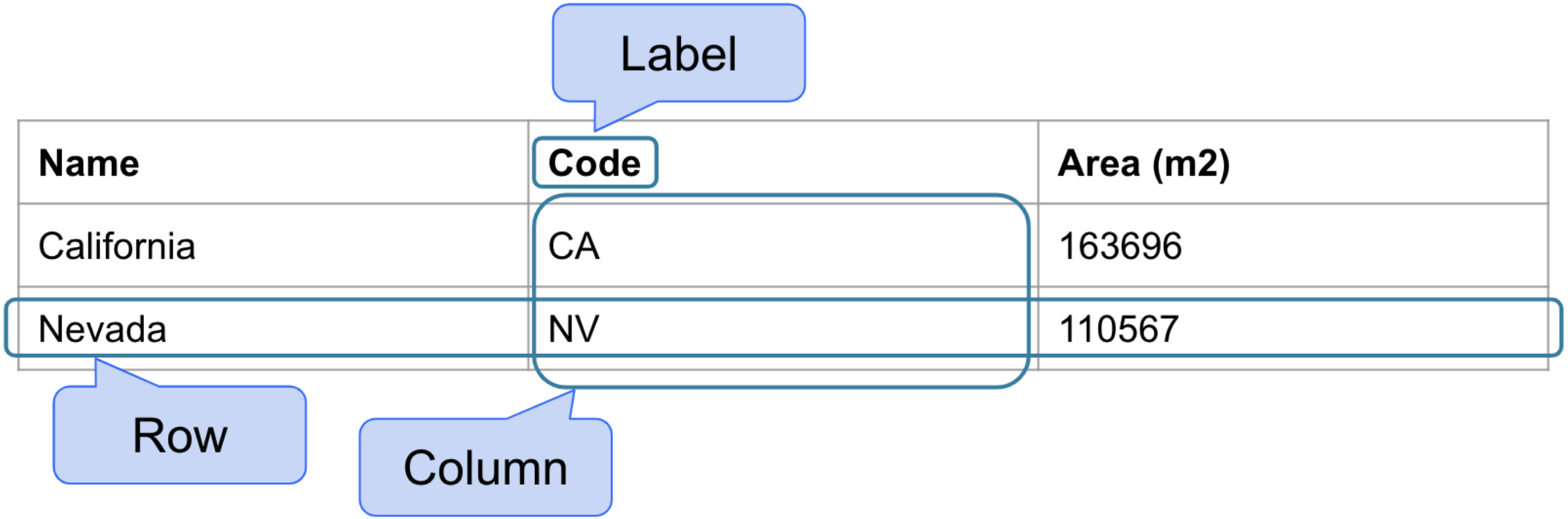

Table Operations

- **`Table.read_table(filename)`** – reads a table from a spreadsheet

- **`Table()`** – creates an empty table

```
t = Table.read_table('table_file.csv')
```

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Demo: open a new Jupyter Notebook at cs1070.com

Discussion Question

`nba` table:

How would you display just the row corresponding to the player who had the highest salary?

Charles Joseph Minard, 1781-1870

- French civil engineer who created one of the greatest graphs of all time
- Visualized Napoleon's 1812 invasion of Russia, including:
  - Number of soldiers
  - Direction of the march
  - Latitude and longitude of each city
  - Temperature on the return journey
  - Dates in November and December

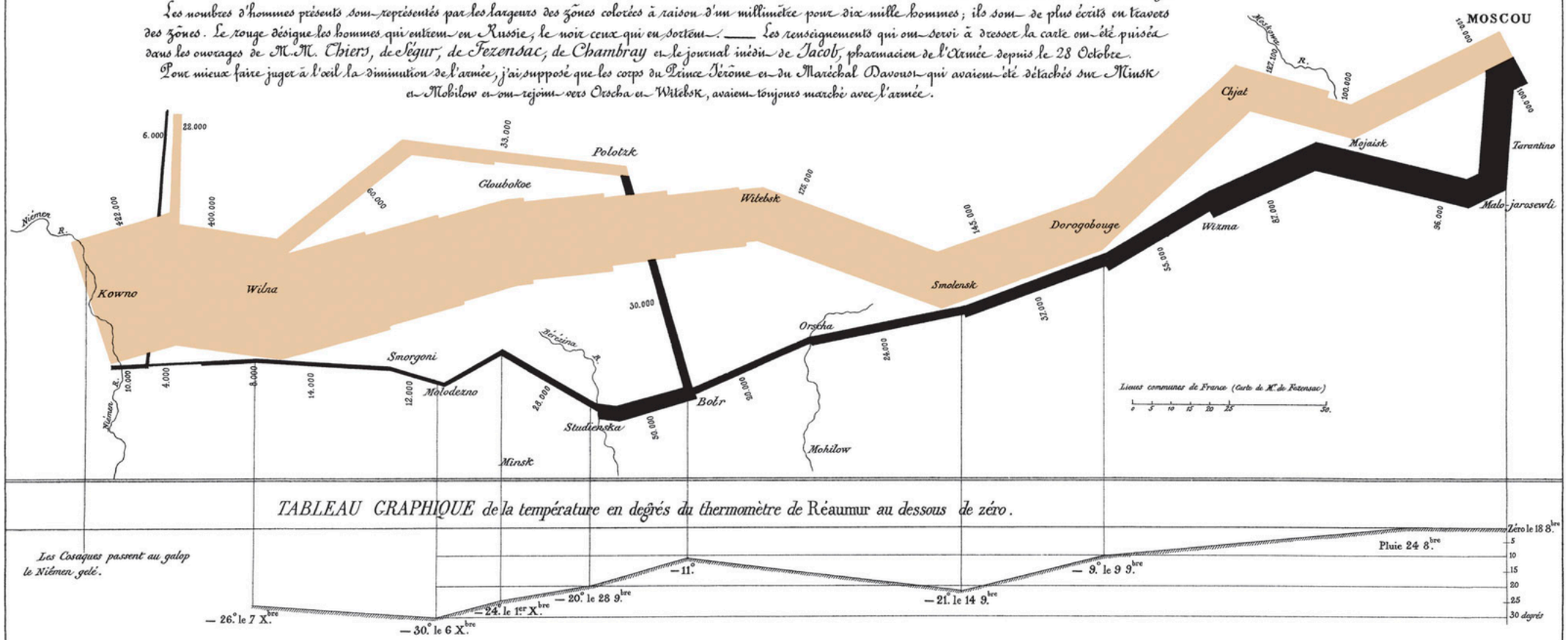
Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Dressée par M. Minard, Inspecteur Général des Ponts et Chaussées en retraite.

Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les largeurs des zônes colorées à raison d'un millimètre pour dix mille hommes ; ils sont de plus écrits en travers des zônes. Le rouge désigne les hommes qui entrent en Russie, le noir ceux qui en sortent. — Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de MM. Thiers, de Ségur, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 28 Octobre.

Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps du Prince Jérôme et du Maréchal Davoust qui avaient été détachés sur Minsk et Mobilow et ont rejoint vers Orscha et Witebsk, avaient toujours marché avec l'armée.



Autog. par Regnier, 8. Pas. Ste Marie St Gain à Paris.

Imp. Lith. Regnier et Dourdet.

Some of Minard's data

Longitude	Latitude	City	Direction	Survivors
32	54.8	Smolensk	Advance	145000
33.2	54.9	Dorogobouge	Advance	140000
34.4	55.5	Chjat	Advance	127100
37.6	55.8	Moscou	Advance	100000
34.3	55.2	Wixma	Retreat	55000
32	54.6	Smolensk	Retreat	24000
30.4	54.4	Orscha	Retreat	20000
26.8	54.3	Moiodexno	Retreat	12000

Open your Jupyter notebook back up