



A Farewell to Files and Databases



Final Exam: 12/7 in SN014 and FB009
from 12pm-3pm

Open book, open notes, open-internet
No human communication

~12 questions Jupyter Notebook
~9 covering materials since the last midterm;
~3 comprehensive



Grading Status

- Midterm
 - To my knowledge all issues are resolved and exams are graded
- Problem Sets (lowest score is dropped)
 - Everyone did well on Problem Set #6
 - Problem Set #5 graded soon! (today?)
 - All *issues* with other problem sets are resolved
 - Still needs grading (Done by Friday?)
- Exercises
 - You get 3 excused misses, the rest are 100% if turned in
- If you still have issues see me after class today or during my office hours tomorrow

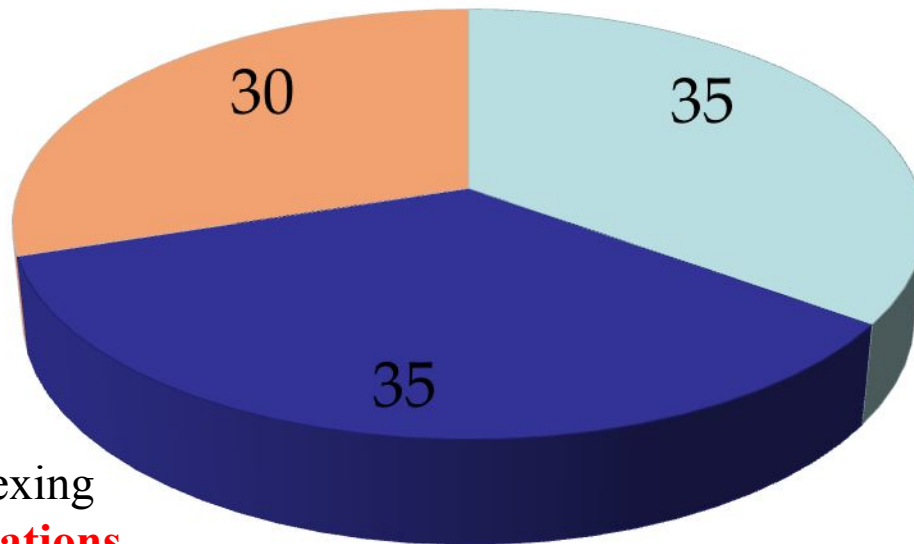


Summary and What to study

- Relational Model
- **Out-of-core sorting**
- **Normal Forms**

Emphasis

- Structured Query Language
- Integrating Dbases & programs
- **NoSQL**
 - **BASE, MapReduce, Hadoop**
 - **Document Model**
 - **Columnar Model**
 - **Graph Model**



- Database Indexing
- **Query Evaluations**
- **Query Optimization**
- **Transactions and Concurrency**

- Applications
- Systems
- Foundations

