Strategies for Writing Queries

Two strategies –

- start with FROM – build a table that contains all of the rows in the desired result and all of the columns you need for the WHERE and SELECT clauses
- add WHERE to pick the desired rows
- add SELECT to pick the desired columns

- start with FROM – build a table that contains all of the rows in the desired result and all of the columns that you need for the SELECT clause
- add WHERE to pick the desired rows, using a subquery if the condition involves information not in the FROM table
- add SELECT to pick the desired columns

Writing Queries

Keep in mind –

- queries should work for all possible data, not just a specific instance

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- NULL values
  - assume NULL values are possible unless disallowed e.g. primary key, NOT NULL constraint
- duplicates
  - assume duplicates are possible unless disallowed e.g. primary key, UNIQUE constraint
- a JOIN or NATURAL JOIN with no matches in the other table "loses" that row