**SQL Functions**

1. Introduction

select \* from recent\_grads limit 10;

1. Conditional Statements

select Major, ShareWomen from recent\_grads

where ShareWomen < 0.5;

select Major, major\_category, Median, ShareWomen from recent\_grads

where ShareWomen > 0.5 and Median > 50000;

select major, median, Unemployed from recent\_grads

where Median >= 10000 or Unemployed <= 1000

limit 20;

select Major, Major\_category, ShareWomen, Unemployment\_rate from recent\_grads

where (Major\_category = 'Engineering') and (ShareWomen > 0.5 or Unemployment\_rate < 0.051);

1. Ordering the data

select Major, ShareWomen, Unemployment\_rate from recent\_grads

where ShareWomen > 0.3 and Unemployment\_rate < 0.1

order by ShareWomen desc;

select Major\_category, Major, Unemployment\_rate from recent\_grads

where Major\_category = 'Engineering' or Major\_category = 'Physical Sciences'

order by Unemployment\_rate;

1. Count statistics

select COUNT(Major) from recent\_grads where ShareWomen < 0.5;

select Major, Major\_category, MIN(Median) from recent\_grads where Major\_category = 'Engineering';

1. Sum statistics

select SUM(Total) from recent\_grads;

select AVG(Total), MIN(Men), MAX(Women) from recent\_grads;

1. Naming resulting columns

select COUNT(Major) as 'Number of Students', MAX(Unemployment\_rate) as 'Highest Unemployment Rate' from recent\_grads;

select COUNT(DISTINCT(Major)) as 'unique\_majors', COUNT(DISTINCT(Major\_category)) as 'unique\_major\_categories', COUNT(DISTINCT(Major\_code)) as 'unique\_major\_codes' from recent\_grads;

1. Quartile spread

SELECT Major, Major\_category, P75th - P25th as 'quartile\_spread' FROM recent\_grads order by quartile\_spread LIMIT 20;