

# Database Design

## CmpE 226

### Practice Problem (4)

### The Gallery Exercise

#### PAINTER

ID	NAME	PHONE
123	Ross	888-4567
126	Itero	345-1122
234	Picasso	456-3345
335	O 'Keefe	567-8999
456	Miro	777-7777

#### PAINTING

PNUM	TITLE	PRICE	ID
2345	Wild Waters	245.00	126
4536	Sea Storm	8359.00	335
6666	Wild Waters	6799.00	234
7878	High Tide	98,000.00	456
6789	Paradise	590,000.00	234
7896	Faded Rose	145.00	123
9889	Sunset	975,000.00	234

#### GALLERY

PNUM	OWNER
2345	Johnson
6666	Johnson
4536	McCloud
7878	McCloud
6789	Palmer
7896	Palmer

9889	Palmer
------	--------

**Express the following queries in SQL using the gallery database.**

### **Basic SQL**

- (a) Find the names of the painters.
- (b) Find the owners of any gallery.
- (c) Find the name and phone number of the painter with id 123.
- (d) Find the price of the painting with title "Paradise".
- (e) Find the name of the painter of each painting (title).
- (f) Find the gallery owner of each painting.
- (g) Find the titles of the paintings in Palmer 's gallery.
- (h) Find the name of the painters who have a painting in Palmer 's Gallery.
- (i) Find the owner of all paintings in the gallery that cost more that \$100,000.00.

### **SQL with aggregation**

- (j) Find the average price of all Picasso paintings listed.
- (k) Find the total price of the paintings in each gallery.
- (l) Find the number of paintings in each gallery.
- (m) Find the price of the most expensive painting.