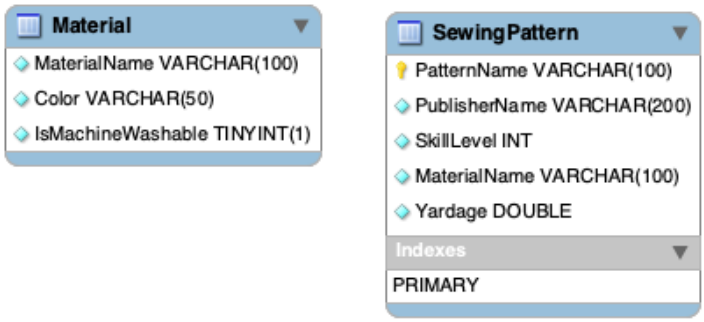
Quiz One

Name: _____

1.) (15 Points) Data abstraction is an important concept in database systems. Give a description of each of three abstraction levels of a database system, and describe someone who would be concerned with that layer (i.e. what types of users are each layer designed for).

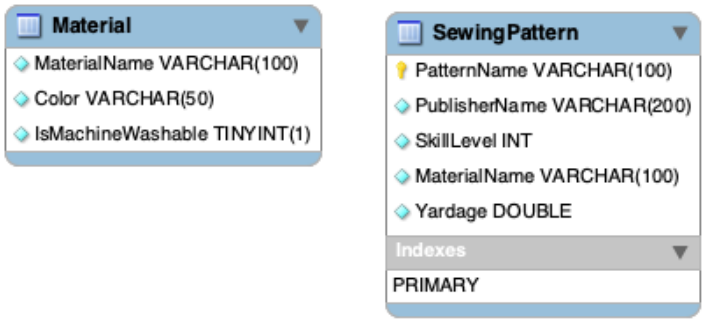
2.) Given the database diagram below:



a.) (2 Points) How many super keys does the ***Material*** Relation have?

b.) (8 Points) Determine the super keys of the ***Material*** Relation:

Diagram copied for your convenience, as you continue problem two:

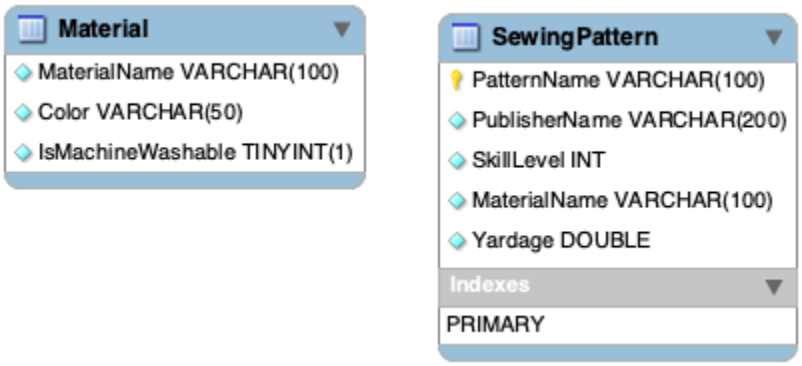


c.) (5 Points) Determine the candidate keys of the ***Material*** Relation:

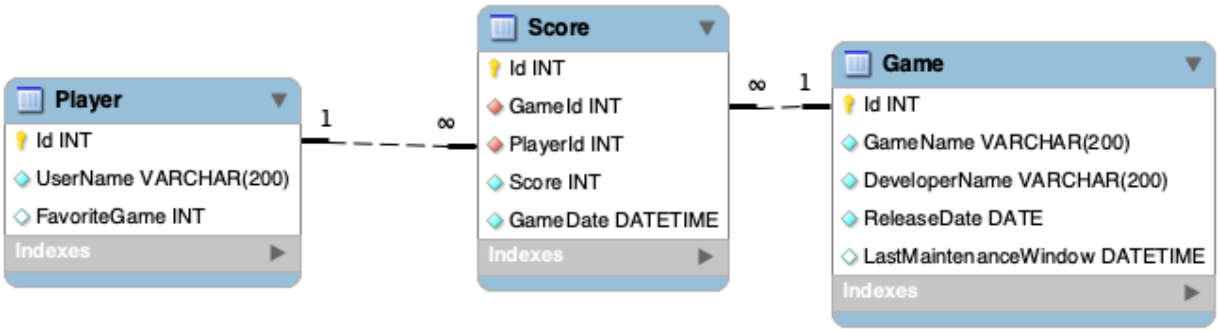
d.) (5 Points) Determine the primary key for the ***Material*** Relation:

e.) (5 Points) Write the schema definition for the ***Material*** relation

3.) (10 Points) Using PatternName as your primary key, write a SQL script to create the table ***SewingPattern***. Keeping in mind that SQL scripts should be able to run more then once.



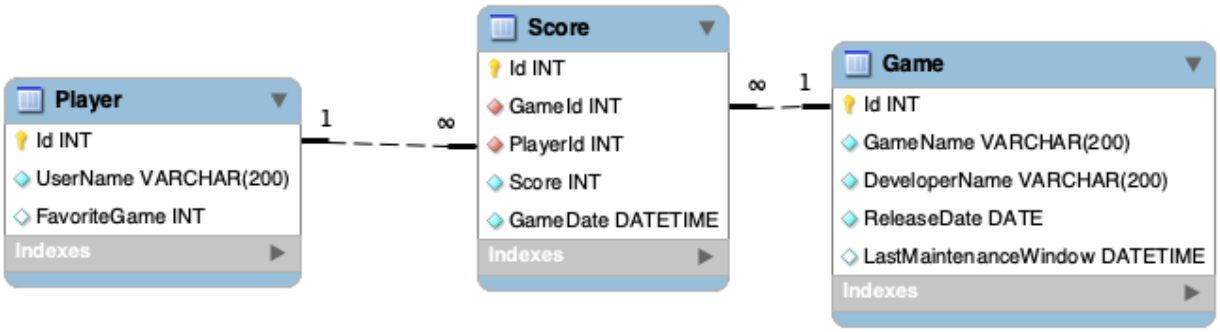
4. Using the database diagram below, write a **SQL Query** to retrieve the requested information:



a. (10 Points) What are the names of all the games developed by Capcom?

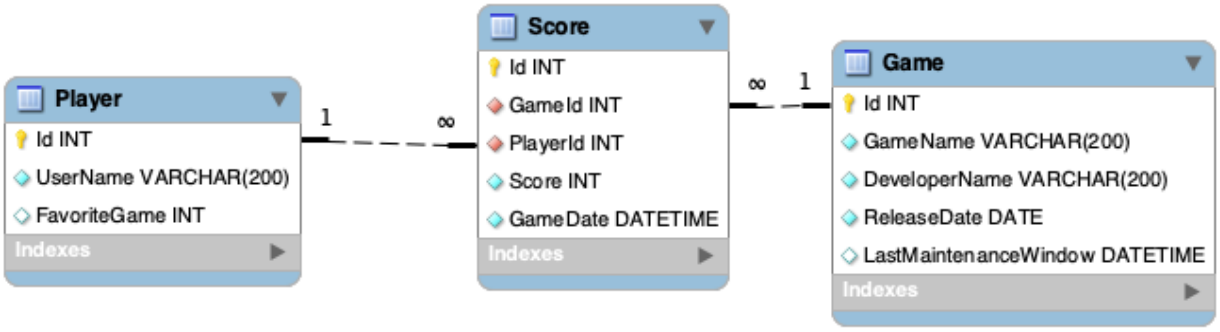
b. (10 Points) What are the names of each player's favorite game?

5. Using the database diagram below, write a **SQL Query** to retrieve the requested information:



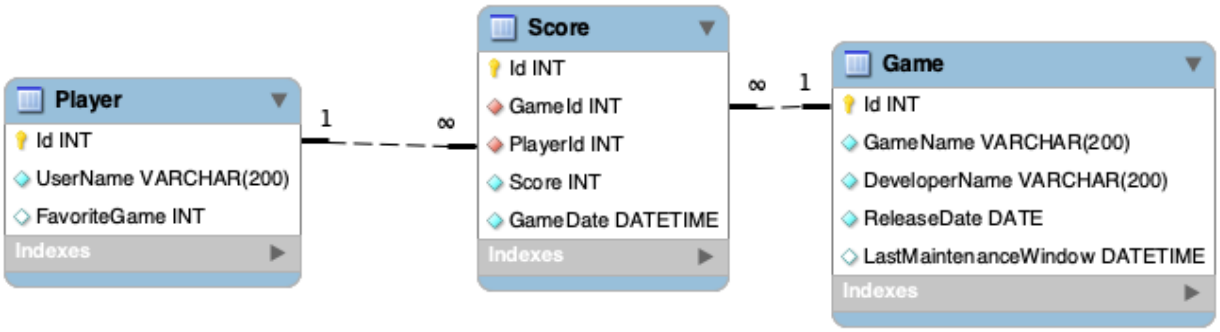
   a. (10 Points) What are the names of the games produced by each game developer? Make sure to alphabetize the results, so the names of the game developers and the names of the games are in alphabetical order.

Diagram copied for your convenience:



b. (10 Points) How many distinct players have a score of 185,000 or more for the game Asteroids?

Diagram copied for your convenience:



c. (10 Points) What is the highest score of each game at the arcade?