

Part A - Creating Databases and Tables

Q1 - IT Fair Schema

Study the table below, which represents laptops for sale at the IT Fair:

laptop_id	int	PK
model_name	varchar(100)	
ram	tinyint	
cpu_clock_speed	float	
video_card	varchar(200)	
price	float	

Perform the task below

1. Create a database named *It-fair*
2. Create the table above
3. Insert a few laptops (at least 3)

Q2 - Boardgame Schema

The following table belongs to a board game database. Write the SQL statements to create the database:

id		PK
title	varchar(200)	
play_time	int	
year_published	int	
description	text	
retail_price	float	

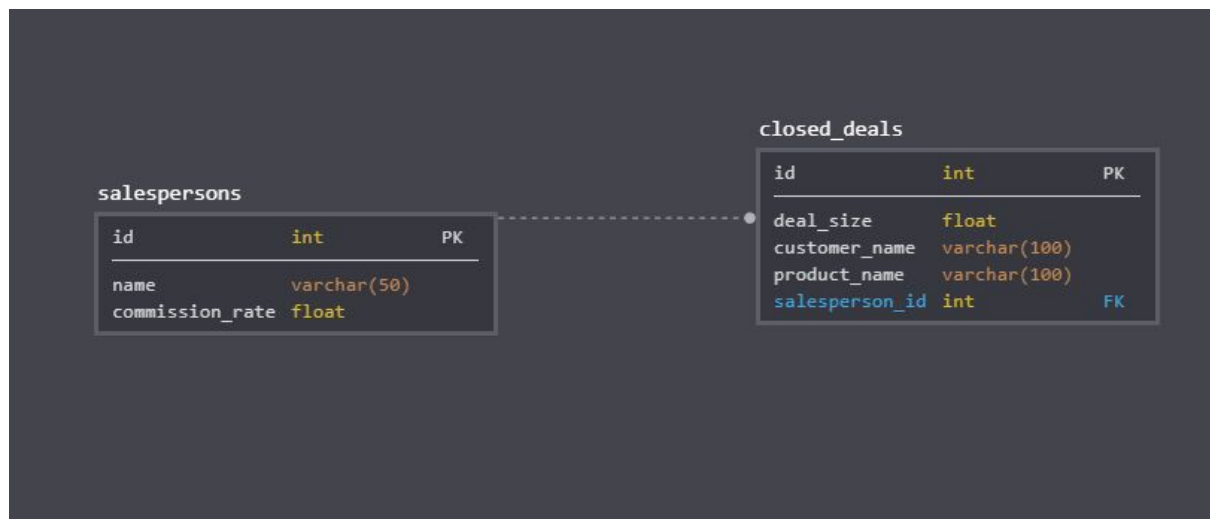
Do the following tasks:

1. Create a new database with the name *boardgamedb*
2. Create the *boardgames* table with the columns shown above.
3. Add in the following board games with the MySQL *insert* statements.

Title	Play Time (min)	Year Published	Description	Retail Price
Saints Petersburg	90	2004	Help Czar Peter builds the grandest city ever	\$30.00
Stone Age	90	2008	Score the most civilization points as the headsman of your tribe	\$50
Quadropolis	60	2015	Build the best city by strategically placing your archiect	\$90

Q3 - Salesperson

Examine the logical schema below:



Do the following tasks:

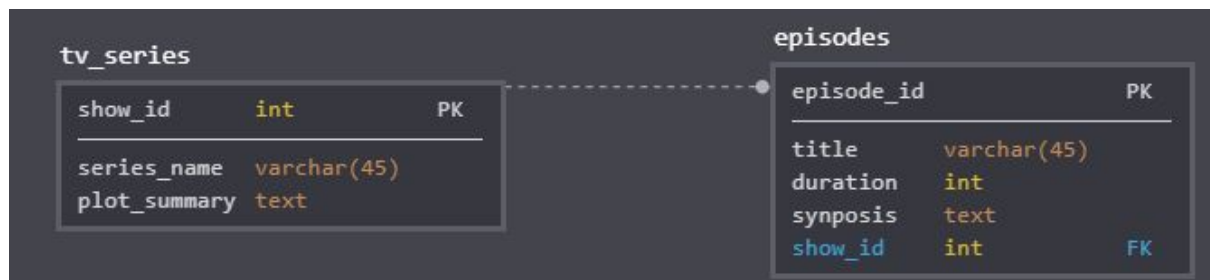
1. Create a database named *sales*
2. Create the two tables above
3. Insert the following sales records:

Salesperson Name	Commission Rate	Customer Name	Deal Size	Product Name
Alan Tay	0.05	Phua Chua Kang	300000	SuperComputer

Mandy Wikes	0.09	Elon Musk	460000	AI System
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Q4 - TV Series Database

Examine the logical diagram showing the relationship between a TV series and its many episodes.



1. Create a new database named *tv_shows*
2. Create the tables above
3. Insert in the following data:

DAYS OF OUR LIVES

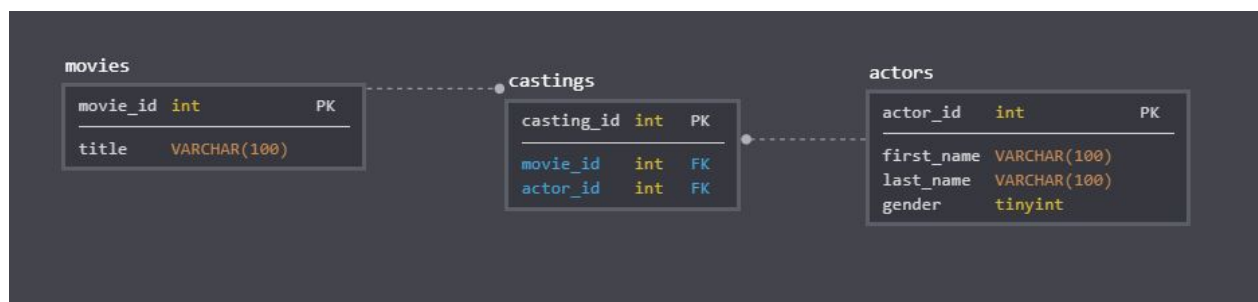
- Episode 1: Jean fell in love with Dave
Synopsis: Jean met Dave at school and they both fell in love.
- Episode 101: Jean met Dave Mk 2
Synopsis: Jean realized that the Dave she knew all along was actually the twin brother of the real Dave.

STAR TREK: DISCOVERY

- Episode 1: Michael Burnham starts a war
Synopsis: Michael hated Klingons and purposely started a war to kill them.

Q5 - Movie Database

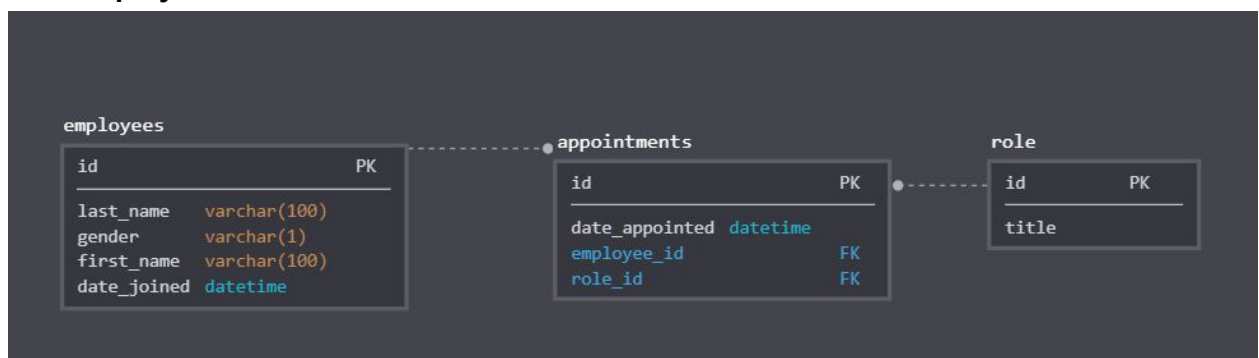
Examine the logical schema diagram below.



Perform the tasks below:

1. Create a database named *movies*
2. Create the three tables above
3. Create the rows for the table based on the description below:
 - Liv Tyler (female) and Viggo Mortensen (male) star in the *Lord of the Rings* movie.
 - Robert Downey Junior starred in the *Ironman*, *Avengers*, *Avengers: Endgame* and *Avengers: Infinity Wars*
 - Jeff Bridges starred in *Ironman*
 - Write a SQL query that shows all the movies that Robert Downey Junior has starred in

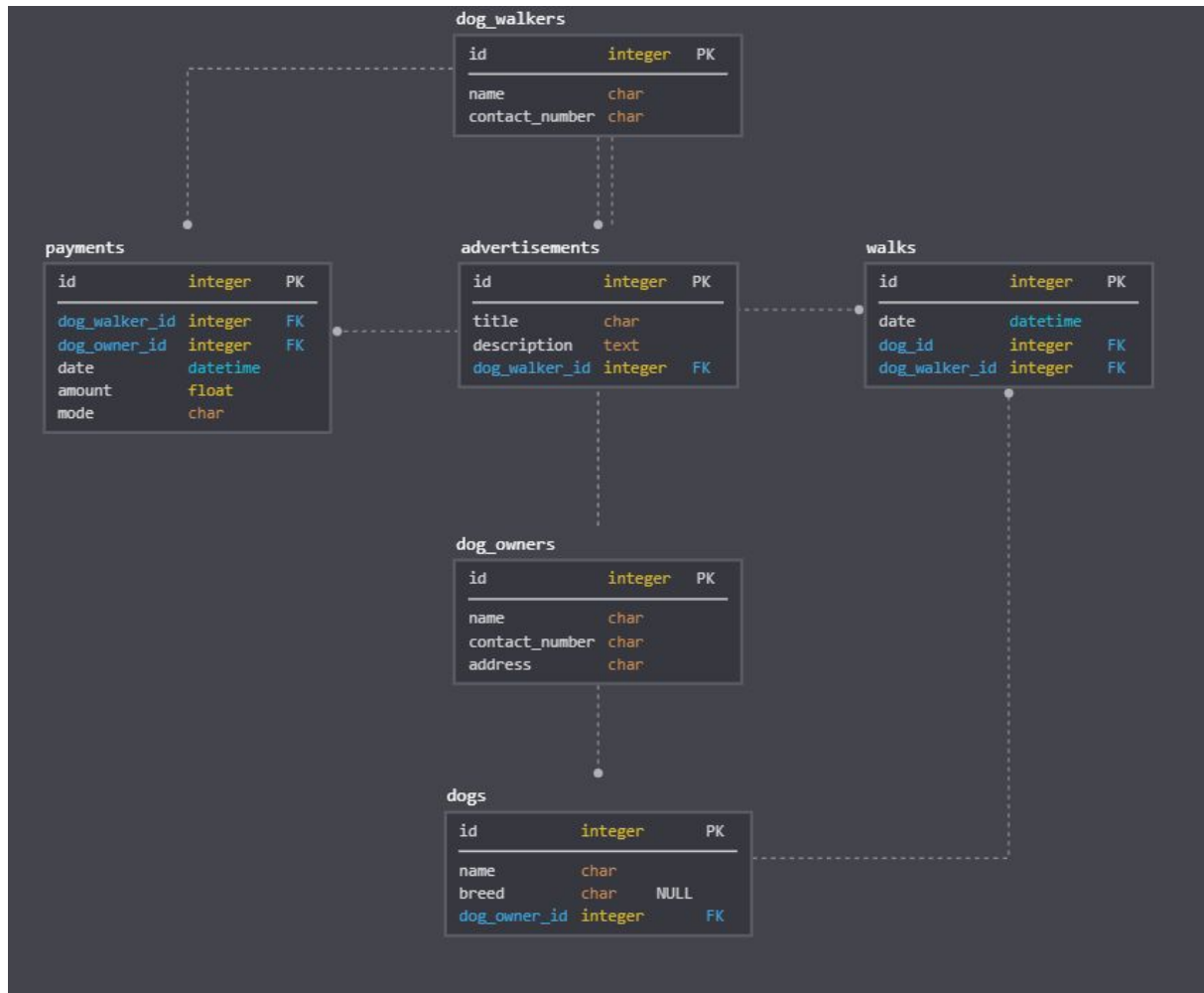
Q6 - Employee and Roles



1. Create a database named *hr*
2. Create the three tables above
3. Create the rows in each database that can capture the information below:

Employee Name	Gender	Date Joined	Role	Start Date
Alan Richardson	Male	18th June 2015	Manager	18th June 2015
Alan Richardson	Male	18th June 2015	Vice President	20th June 2019
Mary Kay	Female	21st July 2016	Business Developer	21st July 2016

FINAL SHOWDOWN



Study the logical diagram above, and create all the entities and their relationships, along with foreign keys.

Insert some sample data using phpMyAdmin to verify that your data is correct.