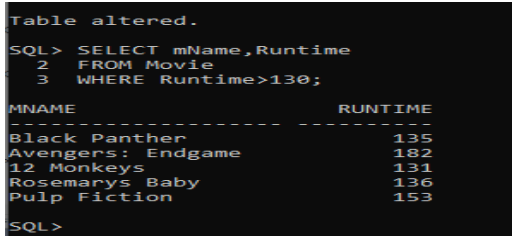
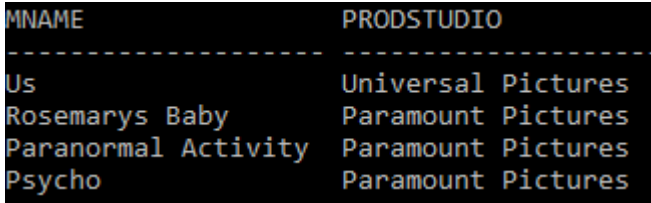
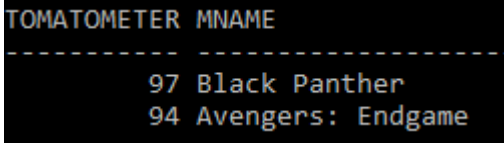
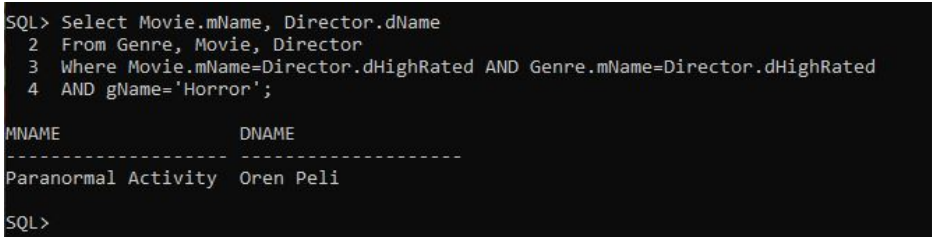
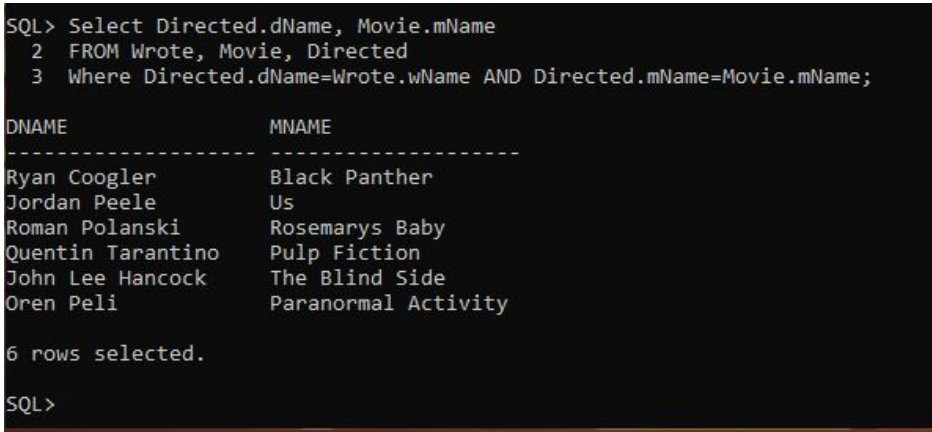
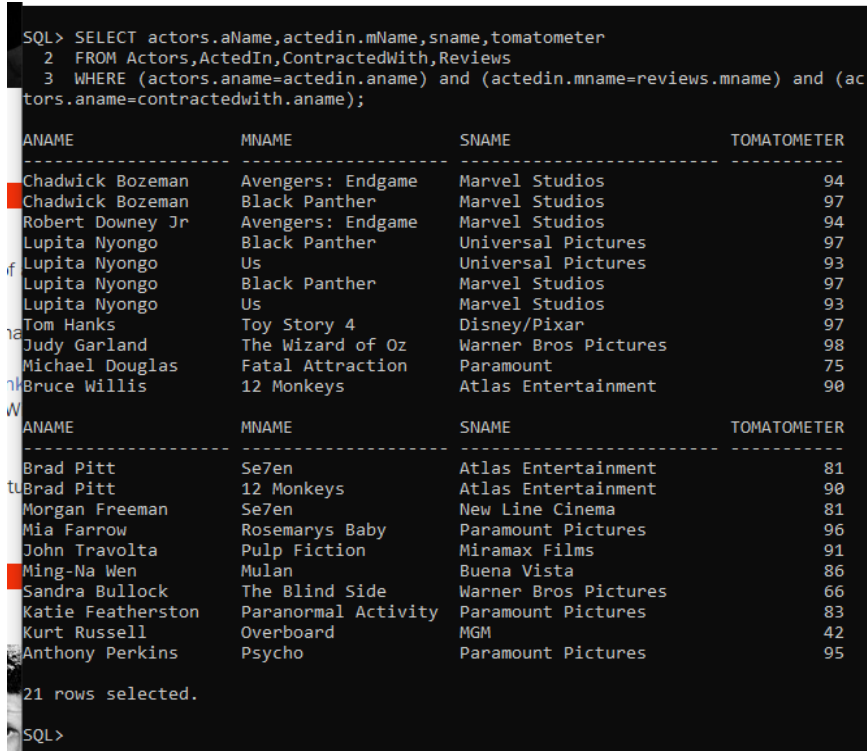


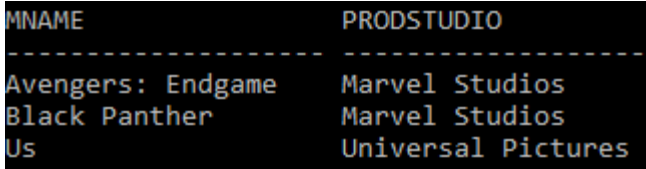
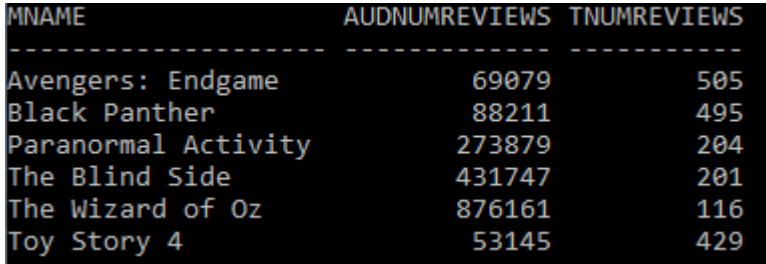
Ross Adams, Evan Smith,  
 Brandon Smith, Nathan Cates  
 Dr. Bernard Chen  
 CSCI 3360 TR  
 April 30, 2020

## Final Project Report - SQL Queries

One Table Query	
Description:	Find the movie name and runtime of any movie with a runtime greater than 130 minutes.
Oracle Code:	SELECT mName,Runtime FROM Movie WHERE Runtime>130;
Screenshot:	 <pre> Table altered. SQL&gt; SELECT mName,Runtime       2  FROM Movie       3  WHERE Runtime&gt;130;  MNAME                                RUNTIME ----- Black Panther                        135 Avengers: Endgame                    182 12 Monkeys                          131 Rosemarys Baby                      136 Pulp Fiction                        153 SQL&gt; </pre>
Two Table Query	
Description:	Find the movie name and production studio of each horror movie (Movie, Genre)
Oracle Code:	SELECT genre.mName,ProdStudio FROM movie,genre WHERE gName='Horror' and movie.mName=genre.mName;
Screenshot:	 <pre> MNAME                                PRODSTUDIO ----- Us                                    Universal Pictures Rosemarys Baby                      Paramount Pictures Paranormal Activity                 Paramount Pictures Psycho                             Paramount Pictures </pre>
Two Table Query	
Description:	Find the movie name and Tomatometer score for each movie produced by Marvel Studios (Reviews, Movie)
Oracle Code:	SELECT tomatometer, movie.mName FROM movie,reviews WHERE reviews.mName=movie.mName

	and prodstudio='Marvel Studios';
Screenshot:	
<b>Three Table Query</b>	
Description:	What are the names of the movies and directors whose highest rated movie was a Horror movie?
Oracle Code:	SELECT Movie.mName, Director.dName FROM Genre, Movie, Director Where Movie.mName=Director.dHighRated AND Genre.mName=Director.dHighRated AND gName='Horror';
Screenshot:	
<b>Three Table Query</b>	
Description:	List the directors and their movies who were also the writers of the movies they directed.
Oracle Code:	SELECT Directed.dName, Movie.mName FROM Wrote, Movie, Directed WHERE Directed.dName=Wrote.wName AND Directed.mName=Movie.mName;
Screenshot:	
<b>Four Table Query</b>	

Description:	Retrieve the names of actors, a movie they were in, the studio they worked for on that movie, and the Tomatometer score of that movie.																																																																																								
Oracle Code:	SELECT actors.aName,actedin.mName,sname,tomatometer FROM Actors,ActedIn,ContractedWith,Reviews WHERE (actors.aname=actedin.aname) and (actedin.mname=reviews.mname) and (actors.aname=contractedwith.aname);																																																																																								
Screenshot:	 <p>The screenshot shows the execution of the SQL query in a terminal window. The output is a table with four columns: ANAME, MNAME, SNAME, and TOMATOMETER. The results are divided into two sections by a dashed line. The first section lists actors Chadwick Bozeman, Robert Downey Jr, Lupita Nyong'o, Tom Hanks, Judy Garland, Michael Douglas, and Bruce Willis. The second section lists actors Brad Pitt, Morgan Freeman, Mia Farrow, John Travolta, Ming-Na Wen, Sandra Bullock, Katie Featherston, Kurt Russell, and Anthony Perkins. The Tomatometer scores range from 81 to 98.</p> <table><tr><th>ANAME</th><th>MNAME</th><th>SNAME</th><th>TOMATOMETER</th></tr><tr><td>Chadwick Bozeman</td><td>Avengers: Endgame</td><td>Marvel Studios</td><td>94</td></tr><tr><td>Chadwick Bozeman</td><td>Black Panther</td><td>Marvel Studios</td><td>97</td></tr><tr><td>Robert Downey Jr</td><td>Avengers: Endgame</td><td>Marvel Studios</td><td>94</td></tr><tr><td>Lupita Nyong'o</td><td>Black Panther</td><td>Universal Pictures</td><td>97</td></tr><tr><td>Lupita Nyong'o</td><td>Us</td><td>Universal Pictures</td><td>93</td></tr><tr><td>Lupita Nyong'o</td><td>Black Panther</td><td>Marvel Studios</td><td>97</td></tr><tr><td>Lupita Nyong'o</td><td>Us</td><td>Marvel Studios</td><td>93</td></tr><tr><td>Tom Hanks</td><td>Toy Story 4</td><td>Disney/Pixar</td><td>97</td></tr><tr><td>Judy Garland</td><td>The Wizard of Oz</td><td>Warner Bros Pictures</td><td>98</td></tr><tr><td>Michael Douglas</td><td>Fatal Attraction</td><td>Paramount</td><td>75</td></tr><tr><td>Bruce Willis</td><td>12 Monkeys</td><td>Atlas Entertainment</td><td>90</td></tr><tr><td>Brad Pitt</td><td>Se7en</td><td>Atlas Entertainment</td><td>81</td></tr><tr><td>Brad Pitt</td><td>12 Monkeys</td><td>Atlas Entertainment</td><td>90</td></tr><tr><td>Morgan Freeman</td><td>Se7en</td><td>New Line Cinema</td><td>81</td></tr><tr><td>Mia Farrow</td><td>Rosemarys Baby</td><td>Paramount Pictures</td><td>96</td></tr><tr><td>John Travolta</td><td>Pulp Fiction</td><td>Miramax Films</td><td>91</td></tr><tr><td>Ming-Na Wen</td><td>Mulan</td><td>Buena Vista</td><td>86</td></tr><tr><td>Sandra Bullock</td><td>The Blind Side</td><td>Warner Bros Pictures</td><td>66</td></tr><tr><td>Katie Featherston</td><td>Paranormal Activity</td><td>Paramount Pictures</td><td>83</td></tr><tr><td>Kurt Russell</td><td>Overboard</td><td>MGM</td><td>42</td></tr><tr><td>Anthony Perkins</td><td>Psycho</td><td>Paramount Pictures</td><td>95</td></tr></table> <p>21 rows selected. SQL&gt;</p>	ANAME	MNAME	SNAME	TOMATOMETER	Chadwick Bozeman	Avengers: Endgame	Marvel Studios	94	Chadwick Bozeman	Black Panther	Marvel Studios	97	Robert Downey Jr	Avengers: Endgame	Marvel Studios	94	Lupita Nyong'o	Black Panther	Universal Pictures	97	Lupita Nyong'o	Us	Universal Pictures	93	Lupita Nyong'o	Black Panther	Marvel Studios	97	Lupita Nyong'o	Us	Marvel Studios	93	Tom Hanks	Toy Story 4	Disney/Pixar	97	Judy Garland	The Wizard of Oz	Warner Bros Pictures	98	Michael Douglas	Fatal Attraction	Paramount	75	Bruce Willis	12 Monkeys	Atlas Entertainment	90	Brad Pitt	Se7en	Atlas Entertainment	81	Brad Pitt	12 Monkeys	Atlas Entertainment	90	Morgan Freeman	Se7en	New Line Cinema	81	Mia Farrow	Rosemarys Baby	Paramount Pictures	96	John Travolta	Pulp Fiction	Miramax Films	91	Ming-Na Wen	Mulan	Buena Vista	86	Sandra Bullock	The Blind Side	Warner Bros Pictures	66	Katie Featherston	Paranormal Activity	Paramount Pictures	83	Kurt Russell	Overboard	MGM	42	Anthony Perkins	Psycho	Paramount Pictures	95
ANAME	MNAME	SNAME	TOMATOMETER																																																																																						
Chadwick Bozeman	Avengers: Endgame	Marvel Studios	94																																																																																						
Chadwick Bozeman	Black Panther	Marvel Studios	97																																																																																						
Robert Downey Jr	Avengers: Endgame	Marvel Studios	94																																																																																						
Lupita Nyong'o	Black Panther	Universal Pictures	97																																																																																						
Lupita Nyong'o	Us	Universal Pictures	93																																																																																						
Lupita Nyong'o	Black Panther	Marvel Studios	97																																																																																						
Lupita Nyong'o	Us	Marvel Studios	93																																																																																						
Tom Hanks	Toy Story 4	Disney/Pixar	97																																																																																						
Judy Garland	The Wizard of Oz	Warner Bros Pictures	98																																																																																						
Michael Douglas	Fatal Attraction	Paramount	75																																																																																						
Bruce Willis	12 Monkeys	Atlas Entertainment	90																																																																																						
Brad Pitt	Se7en	Atlas Entertainment	81																																																																																						
Brad Pitt	12 Monkeys	Atlas Entertainment	90																																																																																						
Morgan Freeman	Se7en	New Line Cinema	81																																																																																						
Mia Farrow	Rosemarys Baby	Paramount Pictures	96																																																																																						
John Travolta	Pulp Fiction	Miramax Films	91																																																																																						
Ming-Na Wen	Mulan	Buena Vista	86																																																																																						
Sandra Bullock	The Blind Side	Warner Bros Pictures	66																																																																																						
Katie Featherston	Paranormal Activity	Paramount Pictures	83																																																																																						
Kurt Russell	Overboard	MGM	42																																																																																						
Anthony Perkins	Psycho	Paramount Pictures	95																																																																																						
Set Theory Query																																																																																									
Description:	(Union) List the production studio and name of movies produced by either Marvel Studios or Universal Pictures																																																																																								
Oracle Code:	SELECT movie.mName,prodStudio FROM movie WHERE ProdStudio='Marvel Studios' UNION SELECT movie.mName,prodStudio FROM movie WHERE ProdStudio='Universal Pictures';																																																																																								

Screenshot:	 <pre> MNAME                                PRODSTUDIO ----- Avengers: Endgame                    Marvel Studios Black Panther                        Marvel Studios Us                                   Universal Pictures </pre>
<b>Set Theory Query</b>	
Description:	(Intersect) Find the movie name, number of critics reviews, and number of audience reviews; for movies who have at least 100 critics and at least 50000 audience reviews
Oracle Code:	<pre> SELECT reviews.mName, audNumReviews, tNumReviews FROM reviews WHERE tNumReviews&gt;=100 INTERSECT SELECT reviews.mName, audNumReviews,tNumReviews FROM reviews WHERE audNumReviews&gt;=50000; </pre>
Screenshot:	 <pre> MNAME                                AUDNUMREVIEWS  TNUMREVIEWS ----- Avengers: Endgame                    69079          505 Black Panther                        88211          495 Paranormal Activity                  273879         204 The Blind Side                       431747         201 The Wizard of Oz                     876161         116 Toy Story 4                          53145          429 </pre>
<b>Grouping Query</b>	
Description:	Group Genres by their movie's average tomatometer rating.
Oracle Code:	<pre> SELECT gName,AVG(Tomatometer) FROM genre,reviews WHERE genre.mname=reviews.mname GROUP BY gname; </pre>

Screenshot:	<pre>SQL&gt; SELECT gName,AVG(Tomatometer)   2  FROM genre,reviews   3  WHERE genre.mname=reviews.mname   4  GROUP BY gname;</pre> <table> <thead> <tr> <th>GNAME</th><th>AVG(TOMATOMETER)</th></tr> </thead> <tbody> <tr><td>Animation</td><td>97</td></tr> <tr><td>Comedy</td><td>54</td></tr> <tr><td>Action &amp; Adventure</td><td>95.5</td></tr> <tr><td>Horror</td><td>91.75</td></tr> <tr><td>Drama</td><td>84.25</td></tr> <tr><td>Kids &amp; Family</td><td>93.6666667</td></tr> <tr><td>Classics</td><td>96.3333333</td></tr> </tbody> </table> <pre>7 rows selected. SQL&gt;</pre>	GNAME	AVG(TOMATOMETER)	Animation	97	Comedy	54	Action & Adventure	95.5	Horror	91.75	Drama	84.25	Kids & Family	93.6666667	Classics	96.3333333								
GNAME	AVG(TOMATOMETER)																								
Animation	97																								
Comedy	54																								
Action & Adventure	95.5																								
Horror	91.75																								
Drama	84.25																								
Kids & Family	93.6666667																								
Classics	96.3333333																								
<b>Grouping Query</b>																									
Description:	Group production studios by their movie's average tomatometer rating.																								
Oracle Code:	<pre>SELECT ProdStudio,AVG(Tomatometer) FROM Movie,Reviews WHERE movie.mname=reviews.mname GROUP BY ProdStudio;</pre>																								
Screenshot:	<pre>SQL&gt; SQL&gt; SELECT ProdStudio,AVG(Tomatometer)   2  FROM Movie,Reviews   3  WHERE movie.mname=reviews.mname   4  GROUP BY ProdStudio;</pre> <table> <thead> <tr> <th>PRODUCTIONSTUDIO</th><th>AVG(TOMATOMETER)</th></tr> </thead> <tbody> <tr><td>Universal Pictures</td><td>93</td></tr> <tr><td>Buena Vista</td><td>86</td></tr> <tr><td>Marvel Studios</td><td>95.5</td></tr> <tr><td>Paramount</td><td>75</td></tr> <tr><td>Atlas Entertainment</td><td>90</td></tr> <tr><td>New Line Cinema</td><td>81</td></tr> <tr><td>Miramax Films</td><td>91</td></tr> <tr><td>Disney/Pixar</td><td>97</td></tr> <tr><td>Paramount Pictures</td><td>91.3333333</td></tr> <tr><td>Warner Bros Pictures</td><td>82</td></tr> <tr><td>MGM</td><td>42</td></tr> </tbody> </table> <pre>11 rows selected. SQL&gt;</pre>	PRODUCTIONSTUDIO	AVG(TOMATOMETER)	Universal Pictures	93	Buena Vista	86	Marvel Studios	95.5	Paramount	75	Atlas Entertainment	90	New Line Cinema	81	Miramax Films	91	Disney/Pixar	97	Paramount Pictures	91.3333333	Warner Bros Pictures	82	MGM	42
PRODUCTIONSTUDIO	AVG(TOMATOMETER)																								
Universal Pictures	93																								
Buena Vista	86																								
Marvel Studios	95.5																								
Paramount	75																								
Atlas Entertainment	90																								
New Line Cinema	81																								
Miramax Films	91																								
Disney/Pixar	97																								
Paramount Pictures	91.3333333																								
Warner Bros Pictures	82																								
MGM	42																								