DB 1차 과제 보고서

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1 구현

각각의 쿼리문들은 execQuery함수와 execQuerySelect 함수를 통해서 실행하였습니다. . 두 함수모두 처음에 SQLAllocStmt함수를 통해 statement 핸들을 할당 받고 할당 성공시에 SQLExecDirect 함수를 통해 쿼리문을 수행하였습니다. 그 후에 쿼리문 수행이 성공적으로 끝났다면 해당 쿼리문을 출력한 후 execQuery 함수는 종료됩니다. 두 함수실행중 에러가 날시 try catch문을 통하여 error trace 를 출력하도록 하였습니다. createTables 함수를 통해서 기본적인 table생성을 하였고 init함수를 통해서 기본 값들을 집어넣었습니다 . 그리고 main문안 코드를 통해서 과제에 주어진 사항들을 수행하였습니다. 모든 쿼리문이 시행된 후에는 table들을 drop한뒤에 main 문을 종료하였습니다.

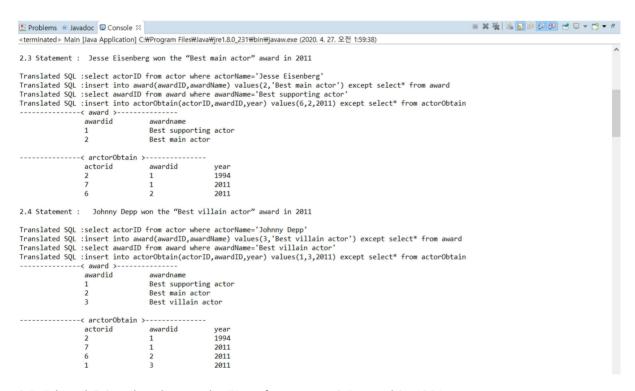
2 컴파일 환경 및 언어

JDBC를 이용하여 postgresql에 접근하였고 eclipse java 2019-09에서 java로 컴파일 하여 실행하였습니다.

3. 출력결과

- 1. Create the tables and insert the proper data based on the provided data. You should make the movie, actor, director, and customer tables first and insert data into other related tables.
- 2. Insert the proper data from the following statements.
- 2.1. Winona Ryder won the "Best supporting actor" award in 1994
- 2.2. Andrew Garfield won the "Best supporting actor" award in 2011

- 2.3. Jesse Eisenberg won the "Best main actor" award in 2011
- 2.4. Johnny Depp won the "Best villain actor" award in 2011



- 2.5. Edward Scissorhands won the "Best fantasy movie" award in 1991
- 2.6. The Dark Knight won the "Best picture" award in 2009

2.5. Edward Scissorhands won the "Best fantasy movie" award in 1991

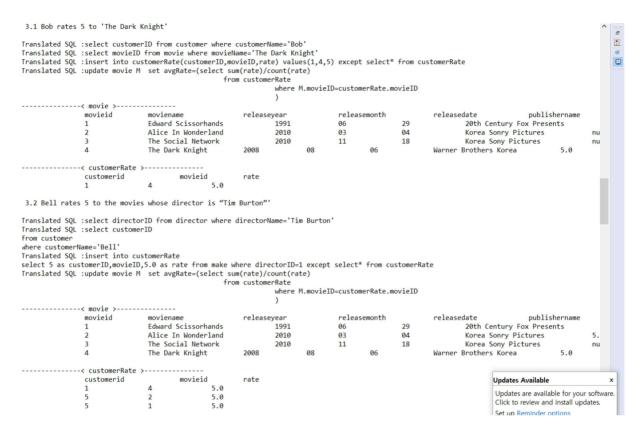
```
Translated SQL :select movieID from movie where movieName='Edward Scissorhands'
Translated SQL :insert into award(awardID,awardName) values(6,'Best fantasy movie') except select* from award Translated SQL :insert into movieObtain(movieID,awardID,year) values(1,6,1991) except select* from movieObtain
               ---< award >-----
                   awardid
                                       awardname
                   1
                                       Best supporting actor
                   2
                                      Best main actor
                                       Best villain actor
                   3
                   6
                                      Best fantasy movie
  -----< movieObtain >-----
                   movieid
                                      awardid
                   1
                                      6
                                                          1991
   2.6. Alice In Wonderland won the "Best fantasy movie" award in 2011
Translated SQL :select movieID from movie where movieName='Edward Scissorhands'
Translated SQL :insert into award(awardID,awardMame) values(6, Best fantasy movie') except select* from award Translated SQL :insert into movieObtain(movieID,awardID,year) values(2,6,2011) except select* from movieObtain
----- award >-----
                   awardid
                                       awardname
                                      Best supporting actor
                   2
                                       Best main actor
                   3
                                      Best villain actor
                                      Best fantasy movie
                   6
                 -< movieObtain >-----
                   movieid
                                       awardid
                                       6
                                                          1001
                   2
                                       6
                                                          2011
```

- 2.7. Alice In Wonderland won the "Best fantasy movie" award in 2011
- 2.8. David Fincher won the "Best director" award in 2011

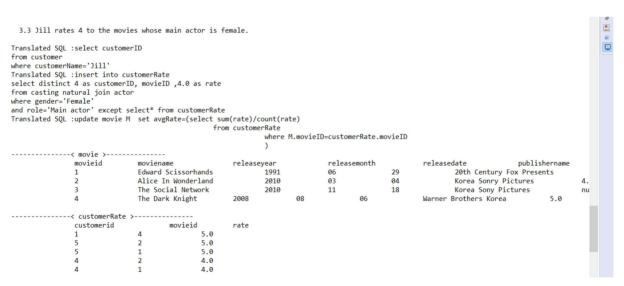
```
2.7. The Dark Knight won the "Best picture" award in 2009
                                                                                                                                                                                                <u>...</u>
Translated SOL :select movieTD from movie where movieName='Edward Scissorhands'
Translated SQL :insert into award(awardID,awardName) values(7,'Best picture') except select* from award Translated SQL :insert into movieObtain(movieID,awardID,awardID,ear) values(4,7,2009) except select* from movieObtain
                   < award >----
                     awardid
                                         Best supporting actor
                                        Best main actor
Best villain actor
Best fantasy movie
                                         Best picture
----- movieObtain >----
                                         awardid
                                        6
2.8 David Fincher won the "Best director" award in 2011
Translated SQL :insert into award(awardID,awardName) values(5,'Best director') except select * from award
Translated SQL :select directorID from director where directorName='David Fincher'
Translated SQL :insert into directorObtain(directorID, awardID, year) values(2,5,2011) except select* from directorObtain
----- actor >-----
                    actorid
1
                                         actorname
                                                                        dateofbirth
                                                                                                       dateofdeath
                                         Johnny Depp
                                                                        1963.6.9
                                                                                                       null
                                         Winona Ryder
                                                                        1971.10.29
                                                                                                       null
                                                                                                                            Female
                                                                       1982.11.12
1974.1.30
1794.4.4
                                        Anne Hathaway
Christian Bale
                                                                                                       null
                                                                                                                            Female
                                                                                                                           Male
                                                                                                       null
                                        Heath Ledger
Jesse Eisenberg
                                                                                                       2008.1.22
                                                                                                                                      Male
                                                                        1983.10.5
                                                                                                       null
                                                                                                                           Male
                                         Andrew Garfield
                                                                        1983.8.20
                                                                                                       null
                                                                                                                           Male
                                         awardname
                    awardid
                                        Best supporting actor
Best main actor
                                         Best villain actor
                                        Best fantasy movie
Best picture
                                        Best director
```

- 3. Insert data to the proper tables based on the following statements and update avgRate if necessary.
- 3.1 Bob rates 5 to "The Dark Knight".

3.2 Bell rates 5 to the movies whose director is "Tim Burton".



3.3 Jill rates 4 to the movies whose main actor is female.



Jack rates 4	to the fantasy mo	ovies.									8
from customer	:select customer	ID									@
where customerN											
						.0 as rate	from movi	eGenre where genreName='	antasy' except	sele	
Franslated SQL :update movie M set avgRate=(select sum(rate)/count(rate)											
			from custome								
				where M.m.	ovieID=cu	stomerRate.	movieID				
	<pre>< movie ></pre>										
	movieid	moviename	release	year	re	leasemonth		releasedate	publishername		
	1	Edward Scissorha	ands	1991	06		29	20th Century Fo	ox Presents		
	2	Alice In Wonder	land	2010	03		04	Korea Sonry Pi	tures	4.	
	3	The Social Netwo	ork	2010	11		18	Korea Sony Pic	tures	nu	
	4	The Dark Knight	2008	0	8	06		Warner Brothers Korea	5.0		
	< customerRate >										
	customerid	movieid	rate								
	1	4	5.0								
	5	2	5.0								
	5	1	5.0								
	4	2	4.0								
	4	1	4.0								
	3	2	4.0								
	3	1	4.0								

- 3.5 John rates 5 to the movies whose director won the "Best director" award
- 4. Select the names of the movies whose actor are dead.
- 5. Select the names of the directors who cast the same actor more than once.
- 3.5 John rates 5 to the movies whose director won the "Best director" award

Translated SQL :select customerID from customer where customerName='John'

where customer Name='John'

Translated SQL :insert into customerRate select distinct 2 as customerID, movieID, 5.0 as rate from award natural join directorObtain natural joir

Translated SQL :undate movie M set avgRate=(select sum(rate)/count(rate))

Translated SQL :update movie M set avgRate=(select sum(rate)/count(rate) from customerRate

where M.movieID=customerRate.movieID
)

)						
-	movie >								
	movieid	movieid moviename		releaseyear		emonth	releasedate	publishername	1
	1	Edward Scissorhands	1991		06 29		20th Century	20th Century Fox Presents	
	2	Alice In Wonderland	2016)	03	04	4 Korea Sonry	Pictures	4
	3	The Social Network	2016)	11	18	Korea Sony	Pictures	5
	4	The Dark Knight	2008	08		06	Warner Brothers Kor	ea 5.0	
		>							
_	customerRate								
	customerid	movieid	rate						
	1	4 5.0							
	5	2 5.0							
	_	4 50							

1 4 5.0 5 2 5.0 5 1 5.0 4 2 4.0 4 1 4.0 3 2 4.0 3 1 4.0 2 3 5.0

4. Select the names of the movies whose actor are dead.

Translated SQL :select movieName from actor natural join casting natural join movie where dateofdeath is not null

moviename The Dark Knight

5. Select the names of the directors who cast the same actor more than once.

Translated SQL :select directorID,actorID,count (actorID) from casting natural join make natural join director group by actorID,directorID having directorid actorid count

- 6. Select the names of the movies and the genres, where movies have the common genre.
- 7. Delete the movies which did not get any award (including all directors and actors) and delete data from related tables

Translated SQL :delete from movie where movie.movieID not in (select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movie.movieID not in(select movieID from casting natural join actorObtain) and movieID not in(select movieID from casting natural join actorObtain) and movieID natural join actorObtain natural join natural

 <pre>-< movie ></pre>									
movieid	moviename	releas	eyear	releasemonth	re	leased	ate	publishername	
1	Edward Scissort	nands	1991	06	29		20th Century Fo	x Presents	
2	Alice In Wonder	rland	2010	03	04	i	Korea Sonry Pic	tures	4.
3	The Social Netv	work	2010	11	18		Korea Sony Pict	tures	5.
 < casting >									
movieid	actorid	role							
1	1	Main actor							
1	2	Main actor							
2	2	Main actor							
2	3	Main actor							
3	6	Main actor							
3	7	Supporting Act	or						
 <pre>-< make ></pre>									
movieid	directorid								
1	1								
2	1								
3	2								
 <pre>-< movieGenre ></pre>									
movieid	genrename								
1	Fantasy								
1	Romance								
2	Fantasy								
2	Adventure								
2	Family								
3	Drama								
 <pre>-< movieObtain >-</pre>									
movieid	awardid	year							
1	6	1991							
2	6	2011							
 <pre>-< customerRate :</pre>	>								
customerid	movieio	d rate							
5	2	5.0							
5	1	5.0							
4	2	4.0							
4	1	4.0							
3	2	4.0							
3	1	4.0							
2	3	5.0							

8. Delete all customers and delete data from related tables.

8. Delete all customers and delete data from related tables.

 <pre>< movie > movieid</pre>	moviename	reles	seyear	releasemonth		releasedate	publishername	
1	Edward Scissorh		1991	06	29		Century Fox Presents	
2	Alice In Wonder		2010	03	04		a Sonry Pictures	4.
3	The Social Netw		2010	11	18		a Sony Pictures	5.
 < casting >								
movieid	actorid	role						
1	1	Main actor						
1	2	Main actor						
2	2	Main actor						
2	3	Main actor						
3	6	Main actor						
3	7	Supporting Act	tor					
 < make >								
movieid	directorid							
1	1							
2	1							
3	2							
 < movieGenre >								
movieid	genrename							
1	Fantasy							
1	Romance							
2	Fantasy							
2	Adventure							
2	Family							
3	Drama							
 < movieObtain >-								
movieid	awardid	year						
1	6	1991						
2	6	2011						
 < customerRate >	,							
customerid	movieid	rate						
 < customer >								
customerid	custome	rname	dateofbirth	gender				
				_				

9. Delete all tables and data.

9. Delete all customers and delete data from related tables.

```
Translated SQL :drop table customerRate
Translated SQL :drop table casting
Translated SQL :drop table directorObtain
Translated SQL :drop table actorObtain
Translated SQL :drop table movieObtain
Translated SQL :drop table movieObtain
Translated SQL :drop table movieGenre
Translated SQL :drop table movie
Translated SQL :drop table director
Translated SQL :drop table actor
Translated SQL :drop table actor
Translated SQL :drop table customer
Translated SQL :drop table award
Translated SQL :drop table genre
table deleted
```