

```

INSERT INTO "Showtime" (
    showtime_id,Date,time,duration)
VALUES(732022, 2022-06-12,10:00,'2 Hr 50 mins'),
(824325, 2022-09-19,18:00,'1 Hr 50 mins'),
(537329, 2022-10-12,19:00,'1 Hr 30 mins'),
(777932, 2022-08-20,18:45,'1 Hr 45 mins'),
(848029, 2022-06-30,12:00,'2 Hr 30 mins'),

INSERT INTO "Tickects"(
    ticket_id, cinema_name, price,showtime)
VALUES (890284, 'Cineplex Odeon Oshawa Cinemas',17,'7:30pm'),
(894903, 'Cineplex Odeon Crowfoot Crossing Cinemas',17,'8:30pm'),
(783892, 'Cineplex Odeon Westhills Cinemas',17,'10:30pm'),
(992844, 'Scotiabank Theatre Chinook',17,'12:30pm'),
(837984, 'Cineplex Odeon South Edmonton Cinemas',17,'6:30pm'),

INSERT INTO "Cinema Location" (
    location_id, cinema_name, )
VALUES (790285, 'Cineplex Odeon Oshawa Cinemas'),
(779492, 'Cineplex Odeon Crowfoot Crossing Cinemas'),
(998284, 'Cineplex Odeon Westhills Cinemas'),
(238032, 'Scotiabank Theatre Chinook'),
(389284, 'Cineplex Odeon South Edmonton Cinemas'),

INSERT INTO "Awards" (
    Movie_Award_ID, Oscars ,Golden_Globe_Awards, Screen_Actors_Guild )
VALUES (794023, 'King Richard','The Eyes of Tammy Faye','Succesion'),
(802494, 'Dune','house of gucci','CODA'),
(939294, 'cruella','The lost daughter','Squid game'),
(820942, 'no time to die','Being the Ricardos','Dopesick'),
(798209, 'encanto','spencer','Hacks'),

INSERT INTO "Categories" (
    Best_Director, Best_Movie, Best_Actor, Best_Actress, Best_Supporting_Actor,
    Best_Supporting_Actress )
VALUES( 794023, "King Richard","The Eyes of Tammy Faye","Succesion"),
(802494, "Dune","house of gucci","CODA"),
(939294, "cruella","The lost daughter","Squid game"),
(820942, "no time to die","Being the Ricardos","Dopesick"),
(798209, "encanto","spencer","Hacks"),

INSERT INTO "Movie Festival" VALUES
(804921,2021,'Tiff and Cannes'),
(929383,2016,'Sundance Film Festival'),

```

```

(992349,2022,'Boston Film Festival'),
(924025,2017,'Berlin International Film Festival'),
(982409,2018,'Venice Film Festival'),

INSERT INTO "Movie" (
    Movie_id, Actors, Directors, Rating, Release_Date, Genre, Budget)
VALUES(790285,'Robert', 'De Niro','steven', 'spielberg',7.4,2020-03-
12,'Action'900000),
(842802,'Katharine','Hepburn','Martin','Scorsese',5.0,2022-10-
18,'Adventure'20000000),
(828044,'Meryl','Streep','Spike', 'Lee',9.0,2013-07-19,'Drama',185000000),
(549485,'Sidney','Poitier','Quentin','Tarantino'9.0,2022-10-
18,'Comedy',13000000),
(820892,'Halle','Berry','Christopher','Nolan', 9.0,2018-05-
22,'Romance',350000);

INSERT INTO "Director" (
    Director_ID, Location_id, Department, First_name, surname, Location_of_birth,
    Year_of_birth, University)
VALUES(883902, 929421,'directing','steven','spielberg', 'Cincinnati,
Ohio',1946,'California State University, Long Beach'),
(988932, 820852,'fine arts','Martin','Scorsese','New York City,
U.S.',1942,'New York University'),
(787292, 802502,'film making','Spike','Lee','Atlanta, Georgia,
U.S.',1957,'Morehouse College (BA) · New York University (MFA)'),
(928420, 842058,
NULL,'Quentin','Tarantino','Knoxville','Tennessee',1963,NULL),
(389840, 829090,'English Literature','Christopher','Nolan','London,
England',1970,'University College London'),

INSERT INTO "Actor/Actress" (
    Actor_ID, First_Name, Surname, Location_of_birth, University, Department,
    Eye_color)
VALUES(802492, 'Robert','De Niro','Manhattan, New York
City',NULL,NULL,'Brown'),
(842802, 'Katharine','Hepburn','Hartford, Connecticut','Bryn Mawr
College','theatre','Blue'),
(787292, 'Meryl','Streep','Summit, New Jersey','Vassar College,Yale
University','drama and costume design and masters in fine art','hazel blue'),
(408024, 'Sidney','Poitier','Cat Island, Bahamas','Brigham
University','Acting','Black'),

```

```
(739729, 'Halle', 'Berry', 'Cleveland, Ohio', 'Cuyahoga Community College', 'Acting', 'Dark Brown'),
```

```
INSERT INTO "Genre" (  
    Genre_ID, Type, Description)  
VALUES(802852, 'Action', 'is a film genre in which the protagonist is thrust into a series of events that typically involve violence and physical feats.'),  
    (805452, 'Adventure', 'is a film genre that shows how adventures are grand, exciting, and often epic tales, usually focused on people on a mission, whose purposes include fame, fortune, and glory'),  
    (865334, 'Comedy', 'is a film genre that are designed to make the audience laugh through amusement and most often work by exaggerating characteristics for humorous effect'),  
    (598822, 'Romance', 'Romance films or romance movies are romantic love stories recorded in visual media for broadcast in theaters and on TV that focus on passion, emotion, and the affectionate romantic involvement of the main characters and the journey that their love takes them through dating, courtship or marriage.'),  
    (889402, 'Drama', 'A drama movie is a movie that depends that depends mostly on in-depth character development, interaction, and highly emotional themes. In a good drama film, the audience are able to experience what other characters are feeling and identify with someone.');
```

```
INSERT INTO "Location" (  
    Location_id, Director_ID, Actor_ID, City, State, Country)  
VALUES(929421, 883902, 802492, 'Oshawa', 'Ontario', 'Canada'),  
    (820852, 988932, 842802, 'Toronto', 'Ontario', 'Canada'),  
    (802502, 787292, 403820, 'Ijeka', 'Lagos', 'Nigeria'),  
    (842058, 928420, 408024, 'Pickering', 'Ontario', 'Canada'),  
    (829090, 389840, 739729, 'Boston', 'Massachusetts', 'Usa');
```

```
INSERT INTO "Movie Tikects" (  
    tickect_id, Movie_id)  
VALUES(790285, 798092),  
    (802842, 882442),  
    (828044, 924942),  
    (549485, 288824),  
    (820892, 904092),
```

```
INSERT INTO "Actor/Actresses Movie" (  
    Actor_ID, Movie_id)  
VALUES(802492, 798092),  
    (842802, 882442),
```

```
(403820, 924942),  
(408024, 288824),  
(739729, 904092),
```

```
INSERT INTO "Movie Director" (  
    Movie_id, Director_ID)  
VALUES(798092, 883902),  
(882442, 988932),  
(924942, 787292),  
(288824, 928420),  
(904092, 389840),
```

```
INSERT INTO "Movie Genre" (  
    Genre_ID, Movie_id)  
VALUES(802852, 798092),  
(805452, 882442),  
(865334, 924942),  
(598822, 288824),  
(889402, 904092),
```

```
INSERT INTO "Director Location" (  
    Director_ID, Location_id)  
VALUES(883902, 929421),  
(988932, 820852),  
(787292, 802502),  
(928420, 842058),  
(389840, 829090),
```

```
INSERT INTO "Actor/Actress Director" (  
    Actor_ID, Director_ID)  
VALUES(802492, 883902),  
(842802, 988932),  
(403820, 787292),  
(408024, 928420),  
(739729, 389840),
```

```
INSERT INTO "Movie Awards" (  
    Movie_id, Movie_Award_ID)  
VALUES(798092, 794023),  
(882442, 802494),  
(924942, 939294),  
(288824, 820942),  
(904092, 798209),
```

```

INSERT INTO "movies at movie festivals" (
    Movie_id, Film_Festival_ID)
VALUES(798092, 792952),
(882442, 490924),
(924942, 099348),
(288824, 848042),
(904092, 880294),

```

```

INSERT INTO "Movies Showtimes" (
    Movie_id, showtime_id)
VALUES(798092, 732022),
(882442, 824325),
(924942, 537329),
(288824, 777932),
(904092, 848029),

```

```

INSERT INTO "movie categories" (
    Movie_id, Best_Director)
VALUES(798092, 'Steven Soderbergh'),
(882442, 'Richard Linklater'),
(924942, 'Paul Thomas Anderson'),
(288824, 'Harry Beaumont'),
(904092, 'Lionel Barrymore'),

```

```

INSERT INTO "tickets cinema location" (
    ticket_id, location_id)
VALUES(790285, 929421),
(802842, 820852),
(828044, 802502),
(549485, 842058),
(820892, 829090),

```

(Lab06)

-- List all directors that were born in Canada

```

SELECT *
FROM "Director"
WHERE EXISTS (SELECT Director_ID
               FROM " Location_of_birth "
               WHERE "Director". Director_ID = ", "Location_of_birth". Director_ID
               AND "Location_of_birth".Country = 'Canada');

```

-- List all movies which are directed by 'David Lynch'

```

SELECT *

```

```

FROM "Movie"
WHERE "Movie".Movie_id IN
    (SELECT Movie_id
     FROM "Movie Director "
     WHERE "Movie Director ".Director_ID =
         (SELECT Director_ID FROM "Director"
          WHERE "Director"._First_name = 'David'
           AND "Director".surname = 'Lynch'
         ));
--List all the actors who played in the movies for which cost of production was
more than $1M.
SELECT *
FROM "Actor"
WHERE "Actor".Actor_ID IN
    (SELECT Movie_id
     FROM "Movie"
     WHERE "Movie".Budget > 1000000
    )
);

-- List all the actors who played in the movies for which cost of production was
more than $1M in other currencies
SELECT "Actor/Actresses", "budget",

"Budget" * 1.36 AS "'CAD'",
"Budget" * 147.46 AS "'JPY'",
"Budget" * 61.53 AS "'RUB'",
"Budget" * 1.0 AS "'EUR'",
"Budget" * 1.0 AS "'CHF'"
FROM "Movie"
WHERE "Movie".Budget > 1000000;
--d)
SELECT *
FROM "Director"
WHERE "Director".surname LIKE 'A%' OR "Director".surname LIKE 'D%';

--e)
SELECT *
FROM "Movie"
WHERE "Genre" IN 'comedy'

--f) Find all the pairs of actors who have blue eye color. Produce pairs in
alphabetic order, e.g., (Howard before Lynch) and do not produce pairs like
(Lynch, Lynch)
-- Had to insert one Actor, as there weren't two Actors which shared a value
INSERT INTO public."Actor/Actress "(

```

```
Actor_ID, First_Name, Surname, Location_of_birth, University, Department,
Eye_color)
VALUES (787292, 'Meryl','Streep','Summit, New Jersey','Vassar College,Yale
University','drama and costume design and masters in fine art','hazel blue');
```

```
SELECT actor1.surname, actor2.surname
FROM " Actor/Actress " as actor1,
     " Actor/Actress " as actor2
WHERE (actor1.Eye_color = 'Blue'
      AND actor2.Eye_color = 'Blue'
      AND actor1.surname != actor2.surname
      AND actor1.surname < actor2.surname);
```

Lab(07)

```
--a)
SELECT AVG("age")

From "Actor/Actress"
--b)
SELECT COUNT(DISTINCT Country)
FROM "Location_of_birth"
WHERE Actor_ID = (
    SELECT Actor_ID
    FROM "Actor/Actress"
    WHERE Movie_id = (SELECT Movie_id FROM "Movie" WHERE "Movie".movie_name =
'beautiful minds'
)
);
--c)
SELECT COUNT(*)
FROM "Actor/Actress "
WHERE Eye_color = 'GREEN';
--d)
SELECT COUNT(*)
FROM "Movie"
WHERE (SELECT Movie_ID FROM "Movie" WHERE "Movie".Movie_id = "Movie".Movie_id)
      = (SELECT Actor_ID FROM "Actor/Actress" WHERE "Actor/Actress".first_name
= 'Brad' AND "Actor/Actress".surname = 'pitt');
--e)
SELECT "Genre".Genre_ID,
      MIN("Movie".Budget),
      AVG("Movie".Budget),
      MAX("Movie".Budget)
```

```

FROM "Genre", "Movie"
WHERE "Movie".Movie_id IN
    (SELECT Movie_id
     FROM "Movie-Genre"
     WHERE "Movie-Genre".Genre_ID = "Genre".Genre_ID)
GROUP BY "Genre".genre_ID;
--f)
--I couldn't find the average rating for each movie which has director born in
Toronto or blue eye color
--g)
SELECT *
FROM "Movie"
WHERE Movie_id IN
    (SELECT " Actor/Actress ".Actor_ID
     FROM " Actor/Actress "
     WHERE movie_id = "Movie".Movie_id
     AND "Actor/Actress".Actor_ID IN
        (SELECT "location_of_birth"Actor_ID
         FROM "location_of_birth"

         GROUP BY Actor_ID
         HAVING COUNT(country) > 1
        )
    )
h)
SELECT Movie_id, COUNT(*)
FROM "Movie", "Award"
WHERE "Award".Movie_id = "Movie".Movie_id
GROUP BY Movie_id;

```

lab(08)/(09)

```

import java.sql.*;

public class lab08{
    private String url = "jdbc:postgresql://localhost:5432/App";
    private String user = "postgres";
    private String password = "Okeke5225*";

    public Connection connect() throws SQLException {
        return DriverManager.getConnection(url, user, password);
    }
}

```



```

public void APP(){
    String sql = "INSERT INTO Showtime (
        showtime_id,Date,time,duration)
    "+ " VALUES(732022, 2022-06-12,10:00,'2 Hr 50 mins'),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "INSERT INTO Tickects(
        ticket_id, cinema_name, price,showtime)
    "+ " VALUES (890284, 'Cineplex Odeon Oshawa Cinemas',17,'7:30pm'),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Cinema Location(
        location_id, cinema_name)
    "+ " VALUES(790285, 'Cineplex Odeon Oshawa Cinemas'),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Awards(
        Movie_Award_ID, Oscars ,Golden_Globe_Awards, Screen_Actors_Guild)
    "+ " VALUES (794023, 'King Richard','The Eyes of Tammy
Faye','Succesion'),";

    try(Connection conn = connect();

```

```

        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
            displayResult(rs);
        } catch(SQLException e){
            System.out.println(e.getMessage());
        }

        String sql = "Categories (
            Best_Director, Best_Movie, Best_Actor, Best_Actress,
Best_Supporting_Actor, Best_Supporting_Actress )
        "+ "(794023, King Richard,The Eyes of Tammy Faye,Succesion)";

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
                displayResult(rs);
            } catch(SQLException e){
                System.out.println(e.getMessage());
            }

        String sql = "Movie(
            Movie_id, Actors, Directors, Rating, Release_Date, Genre,
Budget)
        "+ " VALUES (790285,'Robert', 'De Niro','steven',
'spielberg',7.4,2020-03-12,'Action'900000),";

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
                displayResult(rs);
            } catch(SQLException e){
                System.out.println(e.getMessage());
            }

        String sql = "Director (
            Director_ID, Location_id, Department, First_name,
surname, Location_of_birth, Year_of_birth, University)
        "+ " 988932, 820852,'fine arts','Martin','Scorsese','New York
City, U.S.',1942,'New York University'),";

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
                displayResult(rs);
            }

```

```

    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Actor/Actress(
        Actor_ID, First_Name, Surname, Location_of_birth,
University, Department, Eye_color)
        "+ " VALUES (787292, 'Meryl','Streep','Summit, New
Jersey','Vassar College,Yale University','drama and custome design and masters in
fine art','hazel blue'),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Genre (
        Genre_ID, Type, Description)
        "+ " VALUES(802852,'Action','is a film genre in which the
protagonist is thrust into a series of events that typically involve violence and
physical feats.')

```

```

    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Movie Tikects (
        tickect_id, Movie_id)
    "+ " VALUES(790285, 798092),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Actor/Actresses Movie(
        Actor_ID, Movie_id)
    "+ " VALUES (802492, 798092),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Movie Director (
        Movie_id, Director_ID)
    "+ " VALUES(798092, 883902),";

    try(Connection conn = connect();
        Statement stmt = conn.createStatement();
        ResultSet rs = stmt.executeQuery(sql)){
        displayResult(rs);
    } catch(SQLException e){
        System.out.println(e.getMessage());
    }

    String sql = "Movie Genre(
        Genre_ID, Movie_id)
    "+ " VALUES (798092, 883902),";

```

```

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
            displayResult(rs);
        } catch(SQLException e){
            System.out.println(e.getMessage());
        }

        String sql = "Director Location(
            Director_ID, Location_id)
        "+ " VALUES(883902, 929421),";

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
            displayResult(rs);
        } catch(SQLException e){
            System.out.println(e.getMessage());
        }

        String sql = "Actor/Actress Director(
            Actor_ID, Director_ID)
        "+ " VALUES (802492, 883902),";

        try(Connection conn = connect();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)){
            displayResult(rs);
        } catch(SQLException e){
            System.out.println(e.getMessage());
        }

        String sql = "Movie Awards (
            Movie_id, Movie_Award_ID)
        "+ " VALUES(798092, 794023),";

        try(Connection conn = connect();
            Statement stmt =
conn.createStatement();

            ResultSet rs =
stmt.executeQuery(sql)){

            displayResult(rs);
        } catch(SQLException e){

```

```

System.out.println(e.getMessage());
    }

    String sql = "movies at movie festivals(
        Movie_id, Film_Festival_ID)
        "+ " VALUES (798092, 792952),";

    try(Connection conn = connect();
        Statement stmt =

conn.createStatement();

        ResultSet rs =

stmt.executeQuery(sql)){

            displayResult(rs);
        } catch(SQLException e){

System.out.println(e.getMessage());

    }

    String sql = "Movies Showtimes (
        Movie_id, showtime_id)
        "+ " VALUES(798092, 732022),";

    try(Connection conn = connect();
        Statement stmt =

conn.createStatement();

        ResultSet rs =

stmt.executeQuery(sql)){

            displayResult(rs);
        } catch(SQLException e){

System.out.println(e.getMessage());

    }

    String sql = "movie categories(
        Movie_id, Best_Director)" + "
VALUES(798092, 'Steven Soderbergh'),";

    try(Connection conn = connect();
        Statement stmt =

conn.createStatement();

        ResultSet rs =

stmt.executeQuery(sql)){

```

```

        displayResult(rs);
    } catch (SQLException e){

System.out.println(e.getMessage());

    }

    String sql = "tickets cinema
location(
        ticket_id, location_id)" + "
VALUES(790285, 929421),";

    try(Connection conn = connect();
        Statement stmt =

        ResultSet rs =

            displayResult(rs);
        } catch (SQLException e){

System.out.println(e.getMessage());

        }

    }

    public void displayResult(ResultSet rs) throws SQLException {

        while(rs.next()){
            System.out.println( rs.getString(2) + "\t"
                                + rs.getString(3));
        }
    }

    public static void main(String[] args){
        lab08 app = new lab08();
        try {
            app.connect();
            System.out.println("Successful Connection");
            app.APP();

        } catch (SQLException ex){
            System.out.println(ex.getMessage());
        }
    }
}

```

Lab(10)

1a)

<BARS>

<BAR><NAME>Joe's Bar</NAME>

<BEER><NAME>Bud</NAME>

<PRICE>2.50</PRICE></BEER>

<BEER><NAME>Miller</NAME>

<PRICE>3.00</PRICE></BEER>

</BAR>

</BARS>

xquery version "3.0";

BARS/BAR/BEER

Bud

2.50

Miller

3.00

1b)

<BARS>

<BAR><NAME>Joe's Bar</NAME>

<BEER><NAME>Bud</NAME>

<PRICE>2.50</PRICE></BEER>

<BEER><NAME>Miller</NAME>

<PRICE>3.00</PRICE></BEER>

</BAR>

</BARS>

xquery version "3.0";

for \$beer in BARS/BAR/BEER

where \$beer/PRICE > 2.5

order by \$beer/PRICE

return \$beer

Miller

3.00

2

<MOVIES>

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<year_of_production>2017</year_of_production>

<BUDGET>250000</BUDGET>

<Director>Ron Howard</Director>

<rating>6.4</rating>

<duration>2hr50mins</duration>

<actor><NAME>james deen</NAME>

<age>40</age>

<country>argentina</country>

</actor>

<actor><NAME>craig Miller</NAME>

<age>34</age>

<country>usa</country>

</actor>

<TITLE>Avater</TITLE>

<year_of_production>2009</year_of_production>

<BUDGET>25000000</BUDGET>

<Director>James Cameron</Director>

<rating>9.4</rating>

<duration>2hr30mins</duration>

<actor><NAME>randy king</NAME>

<age>50</age>

<country>united kingdom</country>

</actor>

<actor><NAME>manny hera</NAME>

<age>30</age>

<country>mexico</country>

</actor>

<TITLE>Spider-man</TITLE>

<year_of_production>2002</year_of_production>

<BUDGET>300000</BUDGET>

<Director>Sam Raimi</Director>

<rating>7.4</rating>

<duration>2hr10mins</duration>

<actor><NAME>juan kim</NAME>

<age>39</age>

<country>north korea</country>

</actor>

<actor><NAME>cody keller</NAME>

```

                <age>20</age>
        <country>usa</country>
</actor>
</MOVIE>
</MOVIES>

```

3(a)

```

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        <Director>Ron Howard</Director>
        <rating>6.4</rating>
        <duration>2hr50mins</duration>
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            <age>40</age>
            <country>argentina</country>
        </actor>
        <actor><NAME>craig Miller</NAME>
            <age>34</age>
            <country>usa</country>
        </actor>
    </MOVIE>
</MOVIES>

```

```

<TITLE>Avater</TITLE>
    <year_of_production>2009</year_of_production>
    <BUDGET>25000000</BUDGET>
    <Director>James Cameron</Director>

```

```
<rating>9.4</rating>
<duration>2hr30mins</duration>
<actor><NAME>randy king</NAME>
      <age>50</age>
      <country>united kingdom</country>
</actor>
<actor><NAME>manny hera</NAME>
      <age>30</age>
      <country>mexico</country>
</actor>

<TITLE>Spider-man</TITLE>
      <year_of_production>2002</year_of_production>
      <BUDGET>300000</BUDGET>
      <Director>Sam Raimi</Director>
      <rating>7.4</rating>
      <duration>2hr10mins</duration>
      <actor><NAME>juan kim</NAME>
            <age>39</age>
            <country>north korea</country>
</actor>
      <actor><NAME>cody keller</NAME>
            <age>20</age>
            <country>usa</country>
</actor>
</MOVIE>
</MOVIES>
```

```
xquery version "3.0";
for $actor in MOVIES/MOVIE/actor
where $actor/age < 35
order by $actor/age
return $actor
cody keller
```

20

usa

manny hera

30

mexico

craig Miller

34

usa

3(b)

<MOVIES>

<MOVIE><TITLE>Inferno</TITLE>

<year_of_production>2017</year_of_production>

<BUDGET>250000</BUDGET>

<Director>Ron Howard</Director>

<rating>6.4</rating>

<duration>2hr50mins</duration>

<actor><NAME>james deen</NAME>

<age>40</age>

<country>argentina</country>

</actor>

<actor><NAME>craig Miller</NAME>
 <age>34</age>
 <country>usa</country>
</actor>

<TITLE>Avater</TITLE>
 <year_of_production>2009</year_of_production>
 <BUDGET>25000000</BUDGET>
 <Director>James Cameron</Director>
 <rating>9.4</rating>
 <duration>2hr30mins</duration>
 <actor><NAME>randy king</NAME>
 <age>50</age>
 <country>united kingdom</country>
 </actor>
 <actor><NAME>manny hera</NAME>
 <age>30</age>
 <country>mexico</country>
 </actor>

<TITLE>Spider-man</TITLE>
 <year_of_production>2002</year_of_production>
 <BUDGET>300000</BUDGET>
 <Director>Sam Raimi</Director>
 <rating>7.4</rating>

```
<duration>2hr10mins</duration>
<actor><NAME>juan kim</NAME>
      <age>39</age>
      <country>north korea</country>
</actor>
<actor><NAME>cody keller</NAME>
      <age>20</age>
      <country>usa</country>
</actor>
</MOVIE>
</MOVIES>
xquery version "3.0";
for $year_of_production in MOVIES/MOVIE
where 16=> $year_of_production/TITLE <= 18
order by $ year_of_production/TITLE
return $year_of_production
```