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يونيورسيتي إسلام انتارابغسا ملسيا

KULLIYYAH OF INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF INFORMATION SYSTEMS

INFO 2303 – DATABASE PROGRAMMING
SEMESTER 1 – 2023/2024

Group Project

Gaming Platform System

Section 04

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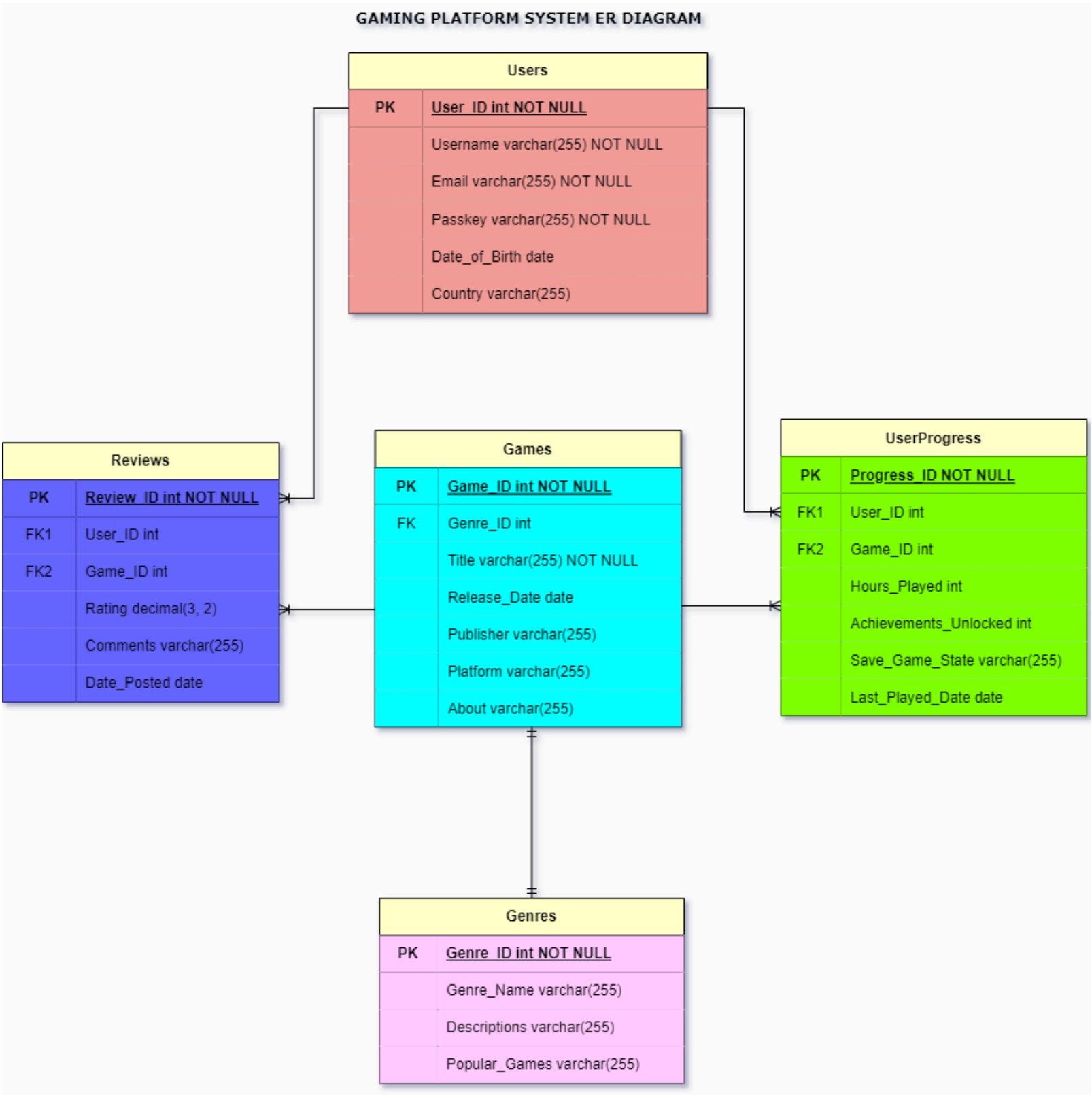
1.0 Project Scenario

Our project is about creating a strong Gaming Platform Database, acting as the central hub for managing games, users, reviews, and player progress. It's designed to be user-friendly for game publishers, gamers, and administrators. For game publishers, it provides easy tools for gaining valuable insights into player preferences and market trends. Gamers get a personalized experience with game exploration and progress tracking. Administrators have tools for maintaining a positive gaming environment. Within our Gaming Platform Database, we introduce a feature that adds a layer of dynamism to the gaming experience. For instance, the ability to compare game features. This functionality empowers users to explore and filter games based on average ratings, providing a more tailored and engaging journey through the gaming catalog. The goal is to make gaming more enjoyable for everyone involved.

2.0 Entity Relationship Diagram



3.0 Data Dictionary

3.1 Users Table

ATTRIBUTE NAME	DATA TYPE	SIZE	NULL
User_ID	INT		NO(PK)
Username	VARCHAR	255	NO
Email	VARCHAR	255	NO
Passkey	VARCHAR	255	NO
Date_of_Birth	DATE		YES
Country	VARCHAR	255	YES

3.2 Games Table

ATTRIBUTE NAME	DATA TYPE	SIZE	NULL
Game_ID	INT		NO(PK)
Genre_ID	INT		NO(FK)
Title	VARCHAR	255	NO
Genre	VARCHAR	255	
Release_Date	DATE		
Publisher	VARCHAR	255	YES
Platform	VARCHAR	255	YES
About	VARCHAR	255	YES
Average_Rating	DECIMAL	3 digits, 2 decimals	YES

3.3 UserProgress Table

ATTRIBUTE NAME	DATA TYPE	SIZE	NULL
Progress_ID	INT		NO(PK)
User_ID	INT		NO(FK1)
Game_ID	INT		NO(FK2)
Hours_Played	INT		YES
Achievements_Unlocked	INT		YES
Save_Game_State	VARCHAR	255	YES
Last_Played_Date	DATE		YES

3.4 Reviews Table

ATTRIBUTE NAME	DATA TYPE	SIZE	NULL
Review_ID	INT		NO(PK)
User_ID	INT		NO(FK1)
Game_ID	INT		NO(FK2)
Rating	DECIMAL	3 digits, 2 decimals	YES
Date_Posted	DATE		YES

3.5 Genres Table

ATTRIBUTE NAME	DATA TYPE	SIZE	NULL
Genre_ID	INT		NO(PK)
Genre_Name	VARCHAR	255	YES
Descriptions	VARCHAR	255	YES
Popular_Games	VARCHAR	255	YES

4.0 Gaming Platform System Table (SQL)

```
-- Drop Tables
drop table genres cascade constraint
drop table reviews cascade constraint
drop table userprogress cascade constraint
drop table games cascade constraint
drop table users cascade constraint


-- Create Users Table
CREATE TABLE Users (
    User_ID INT PRIMARY KEY,
    Username VARCHAR(255) NOT NULL,
    Email VARCHAR(255) NOT NULL,
    Passkey VARCHAR(255) NOT NULL,
    Date_of_Birth DATE,
    Country VARCHAR(255)
);

-- Create Genres Table
CREATE TABLE Genres (
    Genre_ID INT PRIMARY KEY,
    Genre_Name VARCHAR(255),
    Descriptions VARCHAR(255),
    Popular_Games VARCHAR(255)
);

-- Create Games Table
CREATE TABLE Games (
    Game_ID INT PRIMARY KEY,
    Genre_ID INT,
    Title VARCHAR(255) NOT NULL,
    Release_Date DATE,
    Publisher VARCHAR(255),
    Platform VARCHAR(255),
    About VARCHAR(255),
    CONSTRAINT fk_games_genre FOREIGN KEY (Genre_ID) REFERENCES
Genres(Genre_ID)
);


-- Create User Progress Table
CREATE TABLE UserProgress (
    Progress_ID INT PRIMARY KEY,
```

```
    User_ID INT,
    Game_ID INT,
    Hours_Played INT,
    Achievements_Unlocked INT,
    Save_Game_State VARCHAR(255),
    Last_Played_Date DATE,
    CONSTRAINT fk_user_progress_user FOREIGN KEY (User_ID) REFERENCES
Users(User_ID),
    CONSTRAINT fk_user_progress_game FOREIGN KEY (Game_ID) REFERENCES
Games(Game_ID)
);

-- Create Reviews Table
CREATE TABLE Reviews (
    Review_ID INT PRIMARY KEY,
    User_ID INT,
    Game_ID INT,
    Rating DECIMAL(3, 2),
    Comments VARCHAR(255),
    Date_Posted DATE,
    CONSTRAINT fk_reviews_user FOREIGN KEY (User_ID) REFERENCES
Users(User_ID),
    CONSTRAINT fk_reviews_game FOREIGN KEY (Game_ID) REFERENCES
Games(Game_ID)
);
```

5.0 Gaming Platform System Data (SQL)

USERS DATA

(User_ID, Username, Email, Passkey, Date_of_Birth, Country)

```
-- Insert Data for Users
INSERT INTO Users VALUES (1001, 'Gamer123', 'gamer123@email.com',
'securepass', TO_DATE('1990-05-15','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1002, 'LukasHatchingMachine',
'adibrogamer@gmail.com', 'adibrogamer14',
TO_DATE('1998-05-05','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1003, 'Fire_FigherL',
'sonubarman2005@gmail.com', 'arghya9830',
TO_DATE('1993-02-12','YYYY-MM-DD'), 'UK');
INSERT INTO Users VALUES (1004, 'cauholky122',
'singharun1014@gmail.com', 'Shine@2095',
TO_DATE('1993-04-18','YYYY-MM-DD'), 'UK');
INSERT INTO Users VALUES (1005, 'android3',
'pranilmhatre3@gmail.com', 'pranit9309947083',
TO_DATE('1997-05-15','YYYY-MM-DD'), 'UK');
INSERT INTO Users VALUES (1006, 'LukasIsFireFIghter',
'maksandreevjd2331@rambler.ru', 'tapan00k',
TO_DATE('2000-03-15','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1007, 'Dobrac_Profik',
'gurpal0476@gmail.com', 'harry098',
TO_DATE('2002-05-11','YYYY-MM-DD'), 'RU');
INSERT INTO Users VALUES (1008, 'Nik0xdSunnyyyyyy',
'tt1054445@gmail.com', 'tt1054445@',
TO_DATE('2002-04-12','YYYY-MM-DD'), 'RU');
INSERT INTO Users VALUES (1009, 'jejejsjsj1227',
'nakshatragoyal12345@gmail.com', 'nakshatraG@2',
TO_DATE('1998-05-17','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1010, 'lukasczthegame',
'suka_anzhelac8256@rambler.ru', 'Flipkart741',
TO_DATE('1997-09-17','YYYY-MM-DD'), 'BR');
INSERT INTO Users VALUES (1011, 'FoorUkraine',
'vinitvanpartiwar33@gmail.com', 'anki2001',
TO_DATE('1996-08-25','YYYY-MM-DD'), 'UK');
```

```
INSERT INTO Users VALUES (1012, 'adijabsjnr123',
'pabloescobeef@gmail.com', 'Sachin$321',
TO_DATE('1999-02-12','YYYY-MM-DD'), 'BR');
INSERT INTO Users VALUES (1013, 'EdgarDavis3',
'stealthykemon@gmail.com', 'Sachin$321',
TO_DATE('2000-01-15','YYYY-MM-DD'), 'FR');
INSERT INTO Users VALUES (1014, 'tomiskobath',
'Rushikeshsurwase12@gmail.com', 'Rushapillu@07',
TO_DATE('2001-7-18','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1015, 'kevinjeASIAT',
'anchitgogoi10@gmail.com', 'rajagogoi1234s',
TO_DATE('2002-6-15','YYYY-MM-DD'), 'MY');
INSERT INTO Users VALUES (1016, 'burgir',
'anchitgogoi.kvk@gmail.com', '7002520885ag',
TO_DATE('1999-7-12','YYYY-MM-DD'), 'FR');
INSERT INTO Users VALUES (1017, 'kennyjirka',
'harsh24rocky@gmail.com', 'H9013241340',
TO_DATE('1991-10-19','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1018, 'loydman135', 'rcweld2009@gmail.com',
'vicky1212_55', TO_DATE('1993-08-11','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1019, 'nagatowithpain', 'mhucr7@gmail.com',
'MHUMSI1993', TO_DATE('1995-05-24','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1020, 'goku_negg',
'masterspartan1998@gmail.com', '5512632#HUsn',
TO_DATE('1995-01-13','YYYY-MM-DD'), 'FR');
INSERT INTO Users VALUES (1021, 'shredingboi_martin',
'karuane7755@gmail.com', 'HHd#54M2$m',
TO_DATE('1998-11-12','YYYY-MM-DD'), 'FR');
INSERT INTO Users VALUES (1022, 'Jakubko013',
'aboodwarhell2@gmail.com', 'Asas20201ops',
TO_DATE('1999-11-23','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1023, 'svatz_boy', 'asusz370p@gmail.com',
'Asas20201ops', TO_DATE('1994-05-29','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1024, 'elizabeht_FOX',
'vassalloenzo@gmail.com', 'Simone07@#',
TO_DATE('1993-09-15','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1025, 'ruzova_laska',
'elettricaclm@gmail.com', 'Artigiani$1',
TO_DATE('1992-01-22','YYYY-MM-DD'), 'USA');
```

```
INSERT INTO Users VALUES (1026, 'Maruvav', 'davideago7000@gmail.fr',
'Firenze16', TO_DATE('1998-01-23','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1027, 'Mony_kenko123',
'dadyago2611@gmail.com', 'Firenze16',
TO_DATE('1999-05-19','YYYY-MM-DD'), 'MY');
INSERT INTO Users VALUES (1028, 'robloxkoncireal',
'reezh.teek30@gmail.com', 'MINKIOPEL12',
TO_DATE('2003-03-14','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1029, 'lila_robloxlike', 'MINKIOPEL12',
'Ios5bet@8', TO_DATE('2000-05-25','YYYY-MM-DD'), 'USA');
INSERT INTO Users VALUES (1030, 'fan_pagedodo',
'Mattiasporrini@gmail.com', 'uomolupo9',
TO_DATE('1997-01-11','YYYY-MM-DD'), 'MY');
```

GENRES DATA
(Genre_ID, Genre_Name, Descriptions, Popular_Games)

```
-- Insert Data for Genres
INSERT INTO Genres VALUES (5001, 'Sci-Fi', 'Games set in futuristic
and space environments.', 'Space Odyssey, Galactic Adventure');
INSERT INTO Genres VALUES (5002, 'FPS', 'Take on the role of a
character within the game and experience the action through a
first-person perspective.', 'Counter-Strike 2, Overwatch 2, Apex
Legends, Call of Duty: Warzone');
INSERT INTO Genres VALUES (5003, 'RPG', 'Assume the roles of
characters in a fictional setting. Often involve immersive
storytelling, character development, and decision-making that impacts
the game world.', 'Baldurs Gate, Elden Ring, Diablo IV');
INSERT INTO Genres VALUES (5004, 'Sports', 'Popular genre of video
games that simulate the practice of traditional sports such as
football, basketball, soccer, and many others.', 'EA SPORTS FC 24,
Forza Horizon 5');
INSERT INTO Genres VALUES (5005, 'MMORPG', 'Stands for Massively
Multiplayer Online Role-Playing Game, and it refers to a genre of
video games that allows a large number of players to interact with
one another within a virtual world.', 'Path of Exile, Lost Ark');
INSERT INTO Genres VALUES (5006, 'Horror', 'Feature elements of
suspense, fear, and psychological horror, and they can range from
survival horror games to more action-oriented horror titles.',
'Warhammer:Darktide, Phasmophobia');
```

```
INSERT INTO Genres VALUES (5007, 'Survival', 'Typically involve the
player navigating a hostile environment and gathering resources to
survive while also dealing with various challenges such as hunger,
thirst, and hostile enemies.', 'Valheim, The Forest');
INSERT INTO Genres VALUES (5008, 'Fighting', 'Fighting game combat
often features mechanics such as blocking, grappling,
counter-attacking, and chaining attacks together into combos.',
'Mortal Kombat X');
INSERT INTO Genres VALUES (5009, 'Story Rich', 'Feature
well-developed characters, intricate plotlines, and detailed
world-building, providing players with a deep and engaging
experience.', 'Detroit: Become Human');
INSERT INTO Genres VALUES (5010, 'Simulation', 'Simulation games are
a genre of video games that aim to replicate real-world activities or
situations.', 'Euro Truck Simulator 2');
```

GAMES DATA
(Game_ID, Genre_ID, Title, Release_Date, Publisher, Platform, About)

```
-- Insert Data for Games
INSERT INTO Games VALUES (2001, 5001, 'Space Odyssey',
TO_DATE('2022-01-20','YYYY-MM-DD'), 'Galaxy Studios', 'Windows',
'Explore the universe in this epic space adventure.');
INSERT INTO Games VALUES (2002, 5003, 'Baldurs Gate',
TO_DATE('2023-08-03','YYYY-MM-DD'), 'Larian Studios', 'Windows, Mac',
'Gather your party and return to the Forgotten Realms in a tale of
fellowship and betrayal, sacrifice and survival, and the lure of
absolute power.');
INSERT INTO Games VALUES (2003, 5002, 'Counter-Strike 2',
TO_DATE('2023-09-27','YYYY-MM-DD'), 'Valve', 'Windows, Mac, Linux',
'Built on the Source 2 engine, Counter-Strike 2 is modernized with
realistic physically-based rendering, state of the art networking,
and upgraded Community Workshop tools.');
INSERT INTO Games VALUES (2004, 5004, 'EA SPORTS FC 24',
TO_DATE('2023-09-28','YYYY-MM-DD'), 'Electronic Arts', 'Windows', 'EA
SPORTS FC™ 24 welcomes you to The Worlds Game: the most
true-to-football experience ever with HyperMotionV, PlayStyles
optimised by Opta, and an enhanced Frostbite™ Engine.');
INSERT INTO Games VALUES (2005, 5005, 'Path of Exile',
TO_DATE('2013-10-24','YYYY-MM-DD'), 'Grinding Gear Games', 'Windows',
```

```
'You are an Exile, struggling to survive on the dark continent of
Wraeclast, as you fight to earn power that will allow you to exact
your revenge against those who wronged you.');
INSERT INTO Games VALUES (2006, 5010, 'Euro Truck Simulator 2',
TO_DATE('2012-10-18','YYYY-MM-DD'), 'SCS Software', 'Windows, Mac',
'Travel across Europe as king of the road, a trucker who delivers
important cargo across impressive distances!');
INSERT INTO Games VALUES (2007, 5006, 'Warhammer:Darktide',
TO_DATE('2022-12-01','YYYY-MM-DD'), 'Fatshark', 'Windows', 'Take back
the city of Tertium from hordes of bloodthirsty foes in this intense
and brutal action shooter.');
INSERT INTO Games VALUES (2008, 5007, 'Valheim',
TO_DATE('2021-02-02','YYYY-MM-DD'), 'Coffee Stain Publishing',
'Windows, Mac', 'A brutal exploration and survival game for 1-10
players, set in a procedurally-generated purgatory inspired by viking
culture.');
INSERT INTO Games VALUES (2009, 5008, 'Mortal Kombat X',
TO_DATE('2021-04-14','YYYY-MM-DD'), 'Warner Bros. Games', 'Windows,
Mac', 'Experience the Next Generation of the #1 Fighting Franchise.
Mortal Kombat X combines unparalleled, cinematic presentation with
all new gameplay.');
INSERT INTO Games VALUES (2010, 5009, 'Detroit: Become Human',
TO_DATE('2020-06-18','YYYY-MM-DD'), 'Quantic Dream', 'Windows',
'Detroit: Become Human puts the destiny of both mankind and androids
in your hands, taking you to a near future where machines have become
more intelligent than humans.');
INSERT INTO Games VALUES (2011, 5003, 'Elden Ring',
TO_DATE('2022-02-25','YYYY-MM-DD'), 'FromSoftware Inc.', 'Windows',
'Rise, Tarnished, and be guided by grace to brandish the power of the
Elden Ring and become an Elden Lord in the Lands Between.');
INSERT INTO Games VALUES (2012, 5003, 'Diablo IV',
TO_DATE('2023-10-18','YYYY-MM-DD'), 'Blizzard Entertainment',
'Windows', 'Join the fight for Sanctuary in Diablo IV, the ultimate
action RPG adventure.');
INSERT INTO Games VALUES (2013, 5002, 'Apex Legends',
TO_DATE('2020-11-05','YYYY-MM-DD'), 'Electronic Arts', 'Windows,
Linux', 'Master an ever-growing roster of legendary characters with
powerful abilities, and experience strategic squad play and
innovative gameplay.');
```

```
INSERT INTO Games VALUES (2014, 5002, 'Call of Duty: Warzone',
TO_DATE('2022-11-17','YYYY-MM-DD'), 'Activision', 'Windows', 'Welcome
to Call of Duty®: Warzone™, the massive free-to-play combat arena
which now features the brand-new map, Urzikstan.');
INSERT INTO Games VALUES (2015, 5004, 'Forza Horizon 5',
TO_DATE('2021-11-09','YYYY-MM-DD'), 'Xbox Game Studios', 'Windows',
'Your Ultimate Horizon Adventure awaits! Explore the vibrant open
world landscapes of Mexico with limitless, fun driving action in the
worlds greatest cars.');
INSERT INTO Games VALUES (2016, 5001, 'Cyberpunk 2077',
TO_DATE('2020-12-10','YYYY-MM-DD'), 'CD PROJEKT RED', 'Windows',
'Cyberpunk 2077 is an open-world, action-adventure RPG set in the
dark future of Night City — a dangerous megalopolis obsessed with
power, glamor, and ceaseless body modification.');
INSERT INTO Games VALUES (2017, 5005, 'Lost Ark',
TO_DATE('2018-11-07','YYYY-MM-DD'), 'Smilegate', 'Windows', 'A
free-to-play MMO ARPG set in a vast, vibrant world with thrilling
fights, endless customization, and endless adventure.');
INSERT INTO Games VALUES (2018, 5002, 'Overwatch 2',
TO_DATE('2023-08-10','YYYY-MM-DD'), 'Blizzard', 'Windows, Mac',
'Overwatch 2 is a critically acclaimed, team-based shooter game set
in an optimistic future with an evolving roster of heroes. Team up
with friends and jump in today.');
INSERT INTO Games VALUES (2019, 5006, 'Phasmophobia',
TO_DATE('2020-09-19','YYYY-MM-DD'), 'Kinetic Games', 'Windows, Mac,
Linux', 'Phasmophobia is a 4 player online co-op psychological
horror. Paranormal activity is on the rise and its up to you and your
team to use all the ghost-hunting equipment at your disposal in order
to gather as much evidence as you can.');
INSERT INTO Games VALUES (2020, 5007, 'The Forest',
TO_DATE('2018-05-01','YYYY-MM-DD'), 'Kinetic Games', 'Windows,
Linux', 'As the lone survivor of a passenger jet crash, you find
yourself in a mysterious forest battling to stay alive against a
society of cannibalistic mutants. Build, explore, survive in this
terrifying first person survival horror simulator.');
```

USERPROGRESS DATA
(Progress_ID, User_ID, Game_ID, Hours_Played, Achievements_Unlocked, Save_Game_State, Last_Played_Date)

```
-- Insert Data for User Progress
INSERT INTO UserProgress VALUES (3001, 1001, 2001, 33, 5, 'Level 10',
TO_DATE('2022-02-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3002, 1001, 2002, 303, 21, 'Act 10',
TO_DATE('2023-12-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3003, 1002, 2011, 119, 19, 'Warrior
109', TO_DATE('2023-01-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3004, 1003, 2011, 309, 32, 'Vagabond
129', TO_DATE('2022-12-25','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3005, 1004, 2002, 124, 14, 'Act 5',
TO_DATE('2023-11-15','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3006, 1004, 2011, 78, 15, 'Thief
59', TO_DATE('2022-11-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3007, 1005, 2018, 400, 54, '127',
TO_DATE('2023-11-22','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3008, 1006, 2017, 1110, 79,
'Shadowhunter 39', TO_DATE('2023-08-25','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3009, 1007, 2017, 327, 26, 'Paladin
28', TO_DATE('2023-01-02','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3010, 1008, 2003, 1233, 69, 'Level
39 Major Sergeant', TO_DATE('2023-11-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3011, 1009, 2002, 455, 33, 'Act 19',
TO_DATE('2023-12-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3012, 1010, 2011, 33, 7, 'Mage Level
40', TO_DATE('2023-12-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3013, 1011, 2011, 79, 17, 'Samurai
Level 76', TO_DATE('2023-02-22','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3014, 1015, 2011, 109, 23, 'Samurai
Level 99', TO_DATE('2023-12-14','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3015, 1016, 2002, 823, 5, 'Final
Act', TO_DATE('2023-12-09','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3016, 1017, 2002, 159, 8, 'Act 12',
TO_DATE('2023-11-19','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3017, 1017, 2016, 233, 23, 'Level
39', TO_DATE('2023-10-02','YYYY-MM-DD'));
```

```
INSERT INTO UserProgress VALUES (3018, 1017, 2011, 10, 3, 'Samurai
Level 10', TO_DATE('2023-12-15','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3019, 1023, 2013, 731, 8, 'Level
453', TO_DATE('2023-11-09','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3020, 1025, 2004, 113, 6, '78',
TO_DATE('2023-12-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3021, 1029, 2003, 781, 56, 'Level 10
Private', TO_DATE('2024-12-13','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3022, 1029, 2011, 133, 5, 'Bandit
Level 56', TO_DATE('2022-12-11','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3023, 1030, 2003, 233, 5, 'Sergeant
Level 23', TO_DATE('2023-12-07','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3024, 1030, 2011, 77, 22, 'Mage
Level 65', TO_DATE('2023-09-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3025, 1030, 2002, 1002, 50, 'Final
Act', TO_DATE('2023-12-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3026, 1022, 2017, 333, 35, 'Warrior
Level 31', TO_DATE('2023-01-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3027, 1027, 2002, 89, 7, 'Act 4',
TO_DATE('2023-12-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3028, 1028, 2011, 83, 19, 'Prisoner
Level 43', TO_DATE('2023-12-01','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3029, 1012, 2018, 239, 41, '79',
TO_DATE('2023-11-05','YYYY-MM-DD'));
INSERT INTO UserProgress VALUES (3030, 1014, 2019, 535, 32, 'Level
93', TO_DATE('2021-01-25','YYYY-MM-DD'));
```

REVIEWS DATA
(Review_ID, User_ID, Game_ID, Rating, Comments, Date_Posted)

```
-- Insert Data for Reviews
INSERT INTO Reviews VALUES (4001, 1001, 2001, 8.6, 'Amazing space
exploration game!', TO_DATE('2022-02-10','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4002, 1001, 2002, 9.1, 'My god…. Im blown
away by this game. If you were on the fence… buy it. I was a little
skeptical of turn based but entire game is captivating',
TO_DATE('2023-12-14','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4003, 1002, 2011, 9.8, 'Best game ever
made. Best songs best game mechanics best art design everything is
perfect', TO_DATE('2023-12-12','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4004, 1003, 2011, 9.3, 'Best from soft
game and best game I played so far very deep and nice world building
and cool story', TO_DATE('2023-12-09','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4005, 1004, 2002, 9.6, 'Its a game of the
year contender. Easily.', TO_DATE('2023-11-07','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4006, 1004, 2011, 5, 'Elden Ring is
FromSoftware taming the monster they created, not by filing down its
teeth and claws, but by giving players the weapons and armor to
endure it.', TO_DATE('2022-05-25','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4007, 1005, 2018, 5, 'God why',
TO_DATE('2023-10-21','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4008, 1006, 2017, 8.0, 'very good mmo,
though it costs a lot of time sometimes its better watching streams
than playing', TO_DATE('2023-01-01','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4009, 1007, 2017, 7.6, 'Nice game, fun to
play, hard to master. I really loved this game. I stopped because he
need too much Time or money to be competitive',
TO_DATE('2023-08-16','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4010, 1008, 2003, 9.0, 'In an era of
flagging service games, it is refreshing to see an old favourite so
thoroughly rejuvenated. Blizzard, take note: this is how its done.',
TO_DATE('2023-11-02','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4011, 1009, 2002, 6.8, 'First two acts of
this game were great but the awful unplayable 3rd act ruined 60 hours
of gameplay. Dont buy this game until its playable.',
TO_DATE('2022-02-10','YYYY-MM-DD'));
```

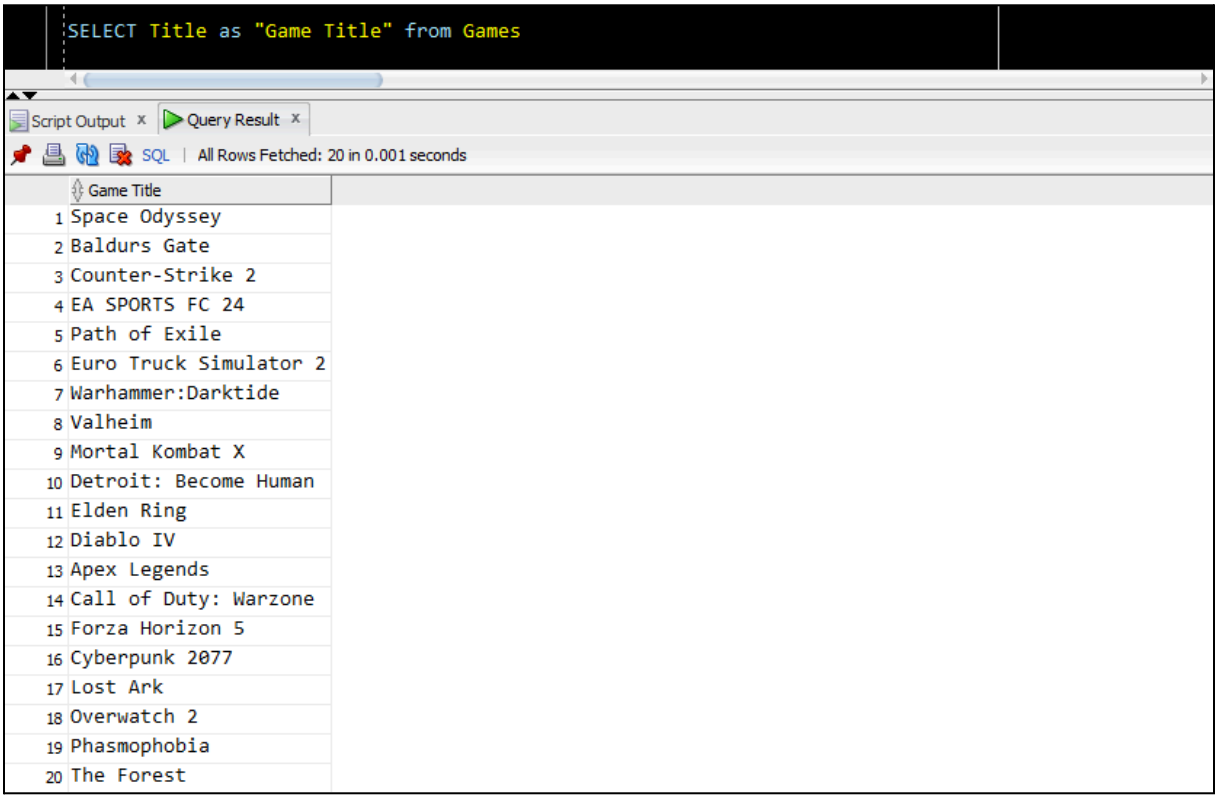
```
INSERT INTO Reviews VALUES (4012, 1010, 2011, 6.5, 'Overly difficult
just for the sake of being difficult Nonexistent story Slow sluggish
combat. Look at how fast the characters move! A 10 year old moves
faster than that.', TO_DATE('2023-11-01','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4013, 1011, 2011, 8.0, 'Elden Ring needed
to be fresh and bold, and it succeeds, putting you in charge of your
own adventure. However the open world has some uneven terrain.',
TO_DATE('2022-03-07','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4014, 1015, 2011, 9.4, 'I seriously lost
my soul to this game, it introduced me to Souls, and if I could
travel back and play it again for the first time I would',
TO_DATE('2022-12-08','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4015, 1016, 2002, 9.9, 'Thats the best
game in the last 15 years or so. I cant remember the last time I had
so much fun playing together with my girlfriend. Baldurs Gate 3 is
one of the best games I have ever played.',
TO_DATE('2023-12-14','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4016, 1017, 2002, 9.9, 'A multi-branched
story and Deep characterization and High reproducibility and First
class voice acting and Attractive technical and artistic graphics',
TO_DATE('2023-12-12','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4017, 1017, 2016, 9.0, 'Ive never
witnessed a game make a comeback quite like Cyberpunk, evolving from
being unplayable to being one of the best video games aka the GOAT of
video games.', TO_DATE('2023-12-11','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4018, 1017, 2011, 8.9, 'The game is an
absolute masterpiece now. The gameplay is an absolute gem. I highly
recommend only playing it on PC though.',
TO_DATE('2023-11-12','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4019, 1023, 2013, 8.0, 'Greatest shooter
ever', TO_DATE('2023-10-25','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4020, 1025, 2004, 4.1, 'I mean as
everyone says. Same as always. Same flaws, defending a joke and the
worst part is that Fifa is getting boring and feels like an arcade
game. But for some reason you still buy it so who is the stupid one
here?', TO_DATE('2023-12-08','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4021, 1029, 2003, 5, 'Git gud.',
TO_DATE('2023-10-11','YYYY-MM-DD'));
```

```
INSERT INTO Reviews VALUES (4022, 1029, 2011, 8.4, 'Ive enjoyed the
writing in Elden Ring, I like when I made my character blue and he
sang the song', TO_DATE('2023-12-07','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4023, 1030, 2003, 9.0, 'Best Tactical Ego
Shooter', TO_DATE('2023-10-30','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4024, 1030, 2011, 5, 'Bro its made by
fromsoftware. Creators of the Dark souls trilogy, Bloodborne and
Sekiro. Need i say more', TO_DATE('2023-11-29','YYYY-MM-DD'));
INSERT INTO Reviews VALUES (4025, 1030, 2002, 9.9, 'After several
hours of experience, I admit Baldurs Gate 3 is a masterpiece and a
special game! Congratulations Larian Studios.',
TO_DATE('2023-12-12','YYYY-MM-DD'));
```

6.0 SQL Statements

6.1 List all games available on the platform

```
SELECT Title as "Game Title" from Games
```



```
SELECT Title as "Game Title" from Games
```

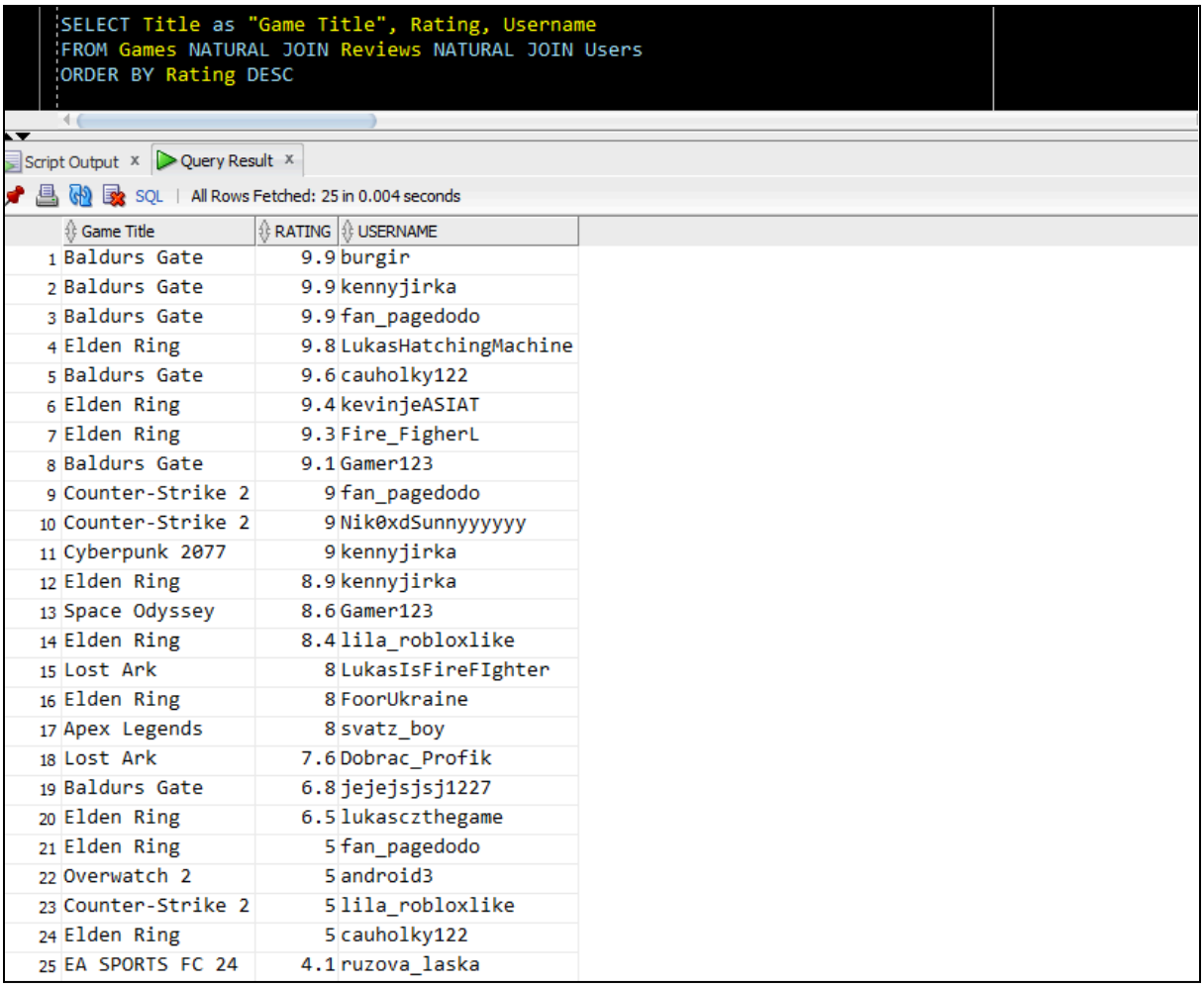
Script Output | Query Result

SQL | All Rows Fetched: 20 in 0.001 seconds

	Game Title
1	Space Odyssey
2	Baldurs Gate
3	Counter-Strike 2
4	EA SPORTS FC 24
5	Path of Exile
6	Euro Truck Simulator 2
7	Warhammer:Darktide
8	Valheim
9	Mortal Kombat X
10	Detroit: Become Human
11	Elden Ring
12	Diablo IV
13	Apex Legends
14	Call of Duty: Warzone
15	Forza Horizon 5
16	Cyberpunk 2077
17	Lost Ark
18	Overwatch 2
19	Phasmophobia
20	The Forest

6.2 List all available rating of games by users

```
SELECT Title as "Game Title", Rating, Username
FROM Games NATURAL JOIN Reviews NATURAL JOIN Users
ORDER BY Rating DESC
```



```
SELECT Title as "Game Title", Rating, Username
FROM Games NATURAL JOIN Reviews NATURAL JOIN Users
ORDER BY Rating DESC
```

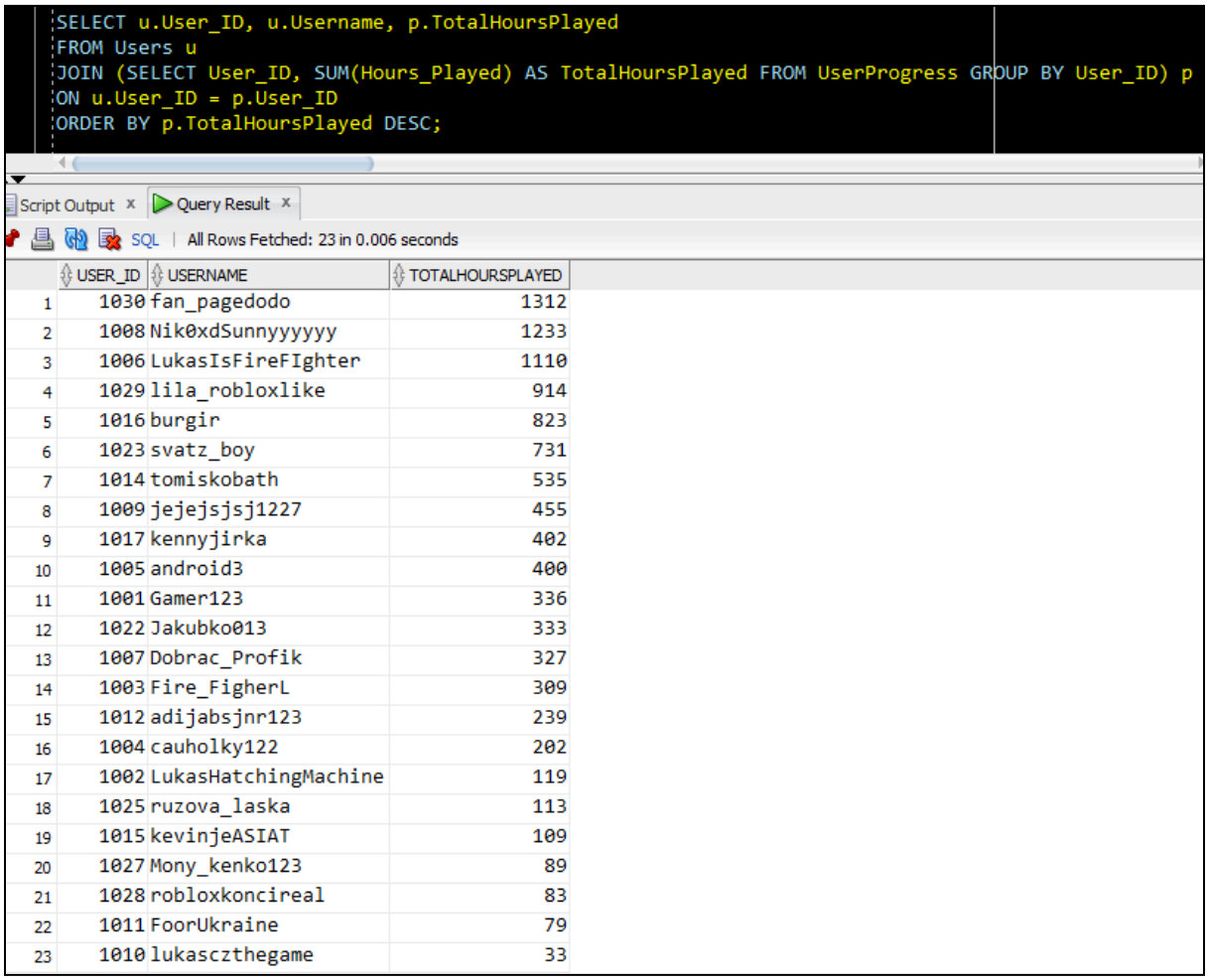
Script Output | Query Result

SQL | All Rows Fetched: 25 in 0.004 seconds

	Game Title	RATING	USERNAME
1	Baldurs Gate	9.9	burgir
2	Baldurs Gate	9.9	kennyjirka
3	Baldurs Gate	9.9	fan_pagedodo
4	Elden Ring	9.8	LukasHatchingMachine
5	Baldurs Gate	9.6	cauholky122
6	Elden Ring	9.4	kevinjeASIAT
7	Elden Ring	9.3	Fire_FigherL
8	Baldurs Gate	9.1	Gamer123
9	Counter-Strike 2	9	fan_pagedodo
10	Counter-Strike 2	9	Nik0xdSunnyyyyyy
11	Cyberpunk 2077	9	kennyjirka
12	Elden Ring	8.9	kennyjirka
13	Space Odyssey	8.6	Gamer123
14	Elden Ring	8.4	lila_robloxlike
15	Lost Ark	8	LukasIsFireFIghter
16	Elden Ring	8	FoorUkraine
17	Apex Legends	8	svatz_boy
18	Lost Ark	7.6	Dobrac_Profik
19	Baldurs Gate	6.8	jejejsjsj1227
20	Elden Ring	6.5	lukasczthegame
21	Elden Ring	5	fan_pagedodo
22	Overwatch 2	5	android3
23	Counter-Strike 2	5	lila_robloxlike
24	Elden Ring	5	cauholky122
25	EA SPORTS FC 24	4.1	ruzova_laska

6.3 List total hours played by each users

```
SELECT u.User_ID, u.Username, p.TotalHoursPlayed
FROM Users u
JOIN (SELECT User_ID, SUM(Hours_Played) AS TotalHoursPlayed FROM
UserProgress GROUP BY User_ID) p
ON u.User_ID = p.User_ID
ORDER BY p.TotalHoursPlayed DESC;
```



```
SELECT u.User_ID, u.Username, p.TotalHoursPlayed
FROM Users u
JOIN (SELECT User_ID, SUM(Hours_Played) AS TotalHoursPlayed FROM UserProgress GROUP BY User_ID) p
ON u.User_ID = p.User_ID
ORDER BY p.TotalHoursPlayed DESC;
```

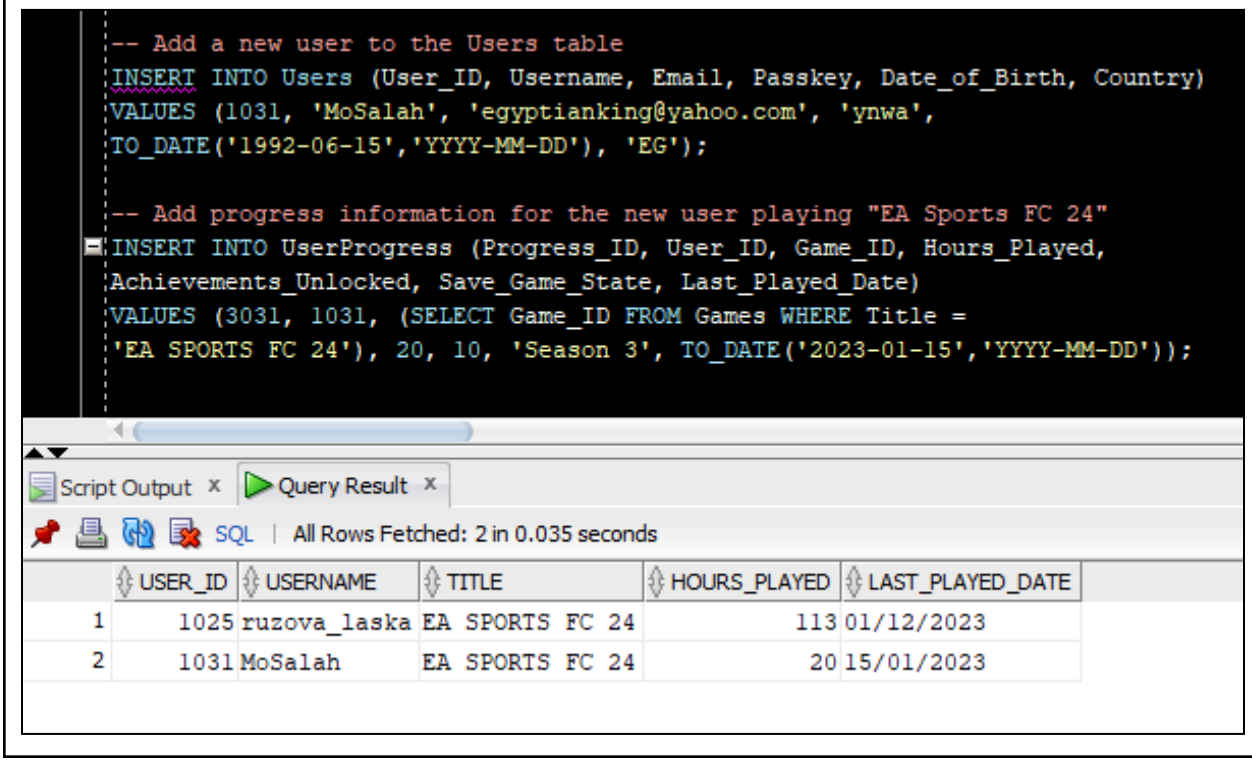
Script Output | Query Result

SQL | All Rows Fetched: 23 in 0.006 seconds

	USER_ID	USERNAME	TOTALHOURSPLAYED
1	1030	fan_pagedodo	1312
2	1008	Nik0xdSunnyyyyyy	1233
3	1006	LukasIsFireFIghter	1110
4	1029	lila_robloxlike	914
5	1016	burgir	823
6	1023	svatz_boy	731
7	1014	tomiskobath	535
8	1009	jejejsjsj1227	455
9	1017	kennyjirka	402
10	1005	android3	400
11	1001	Gamer123	336
12	1022	Jakubko013	333
13	1007	Dobrac_Profik	327
14	1003	Fire_FigherL	309
15	1012	adijabsjnr123	239
16	1004	cauholky122	202
17	1002	LukasHatchingMachine	119
18	1025	ruzova_laska	113
19	1015	kevinjeASIAT	109
20	1027	Mony_kenko123	89
21	1028	robloxkoncireal	83
22	1011	FoorUkraine	79
23	1010	lukasczthegame	33

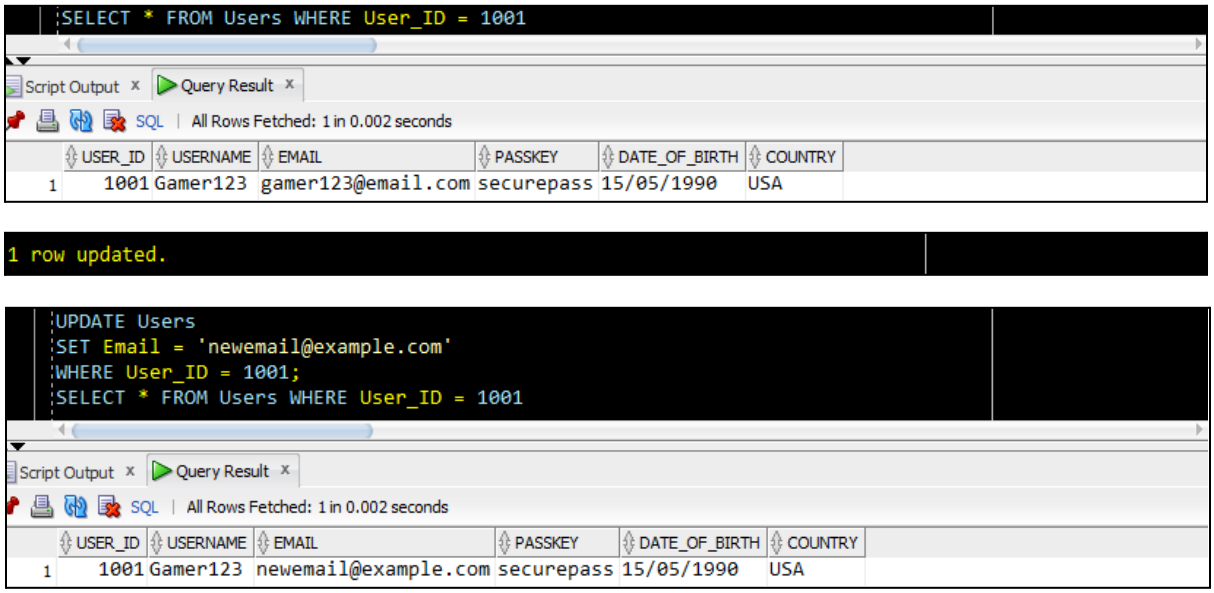
6.4 Add a new player that plays EA SPORTS FC 24

```
INSERT INTO Users (User_ID, Username, Email, Passkey, Date_of_Birth,
Country)
VALUES (1031, 'MoSalah', 'egyptianking@yahoo.com', 'ynwa',
TO_DATE('1992-06-15','YYYY-MM-DD'), 'EG');

INSERT INTO UserProgress (Progress_ID, User_ID, Game_ID, Hours_Played,
Achievements_Unlocked, Save_Game_State, Last_Played_Date)
VALUES (3031, 1031, (SELECT Game_ID FROM Games WHERE Title =
'EA SPORTS FC 24'), 20, 10, 'Season 3',
TO_DATE('2023-01-15','YYYY-MM-DD'));
```



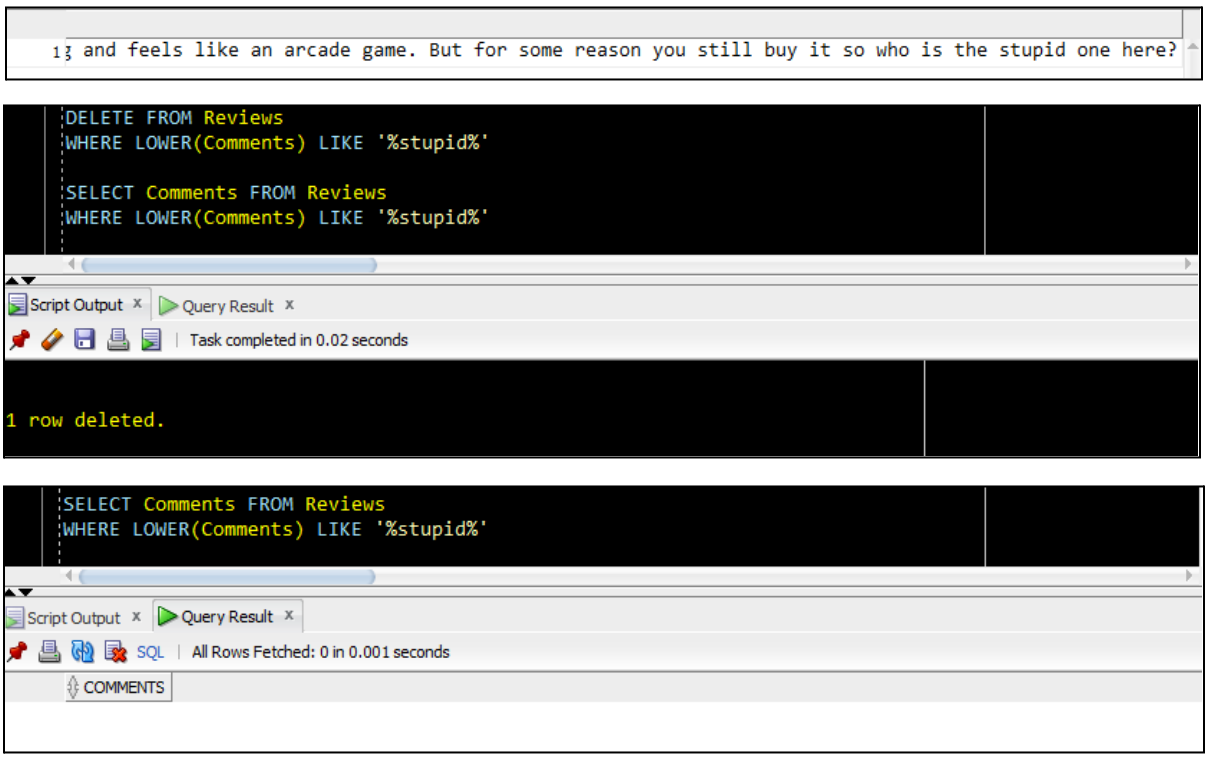
6.5 Update user's email

```
UPDATE Users
SET Email = 'newemail@example.com'
WHERE User_ID = 1001;
SELECT * FROM Users WHERE User_ID = 1001;
```



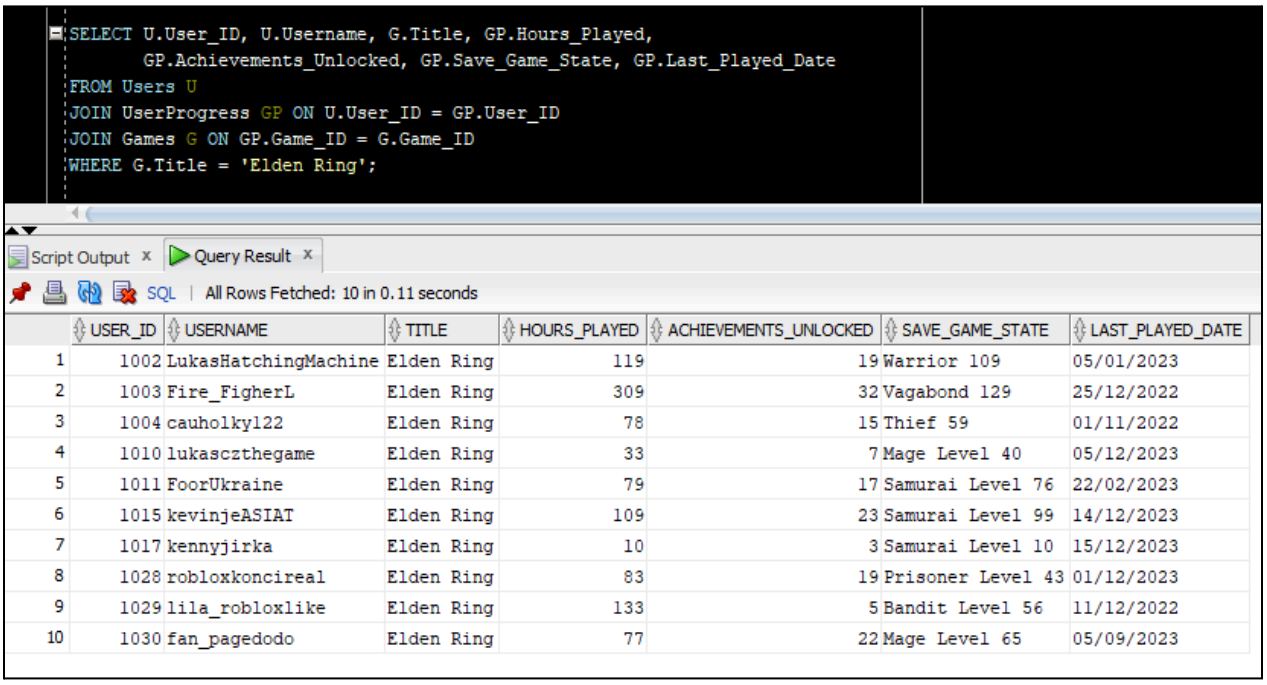
6.6 Delete review containing inappropriate word

```
DELETE FROM Reviews
WHERE LOWER(Comments) LIKE '%stupid%'

SELECT Comments FROM Reviews
WHERE LOWER(Comments) LIKE '%stupid%'
```



6.7 List all players and their progress who play Elden Ring

```
SELECT U.User_ID, U.Username, G.Title, GP.Hours_Played,
       GP.Achievements_Unlocked, GP.Save_Game_State, GP.Last_Played_Date
FROM Users U
JOIN UserProgress GP ON U.User_ID = GP.User_ID
JOIN Games G ON GP.Game_ID = G.Game_ID
WHERE G.Title = 'Elden Ring';
```



```
SELECT U.User_ID, U.Username, G.Title, GP.Hours_Played,
       GP.Achievements_Unlocked, GP.Save_Game_State, GP.Last_Played_Date
FROM Users U
JOIN UserProgress GP ON U.User_ID = GP.User_ID
JOIN Games G ON GP.Game_ID = G.Game_ID
WHERE G.Title = 'Elden Ring';
```

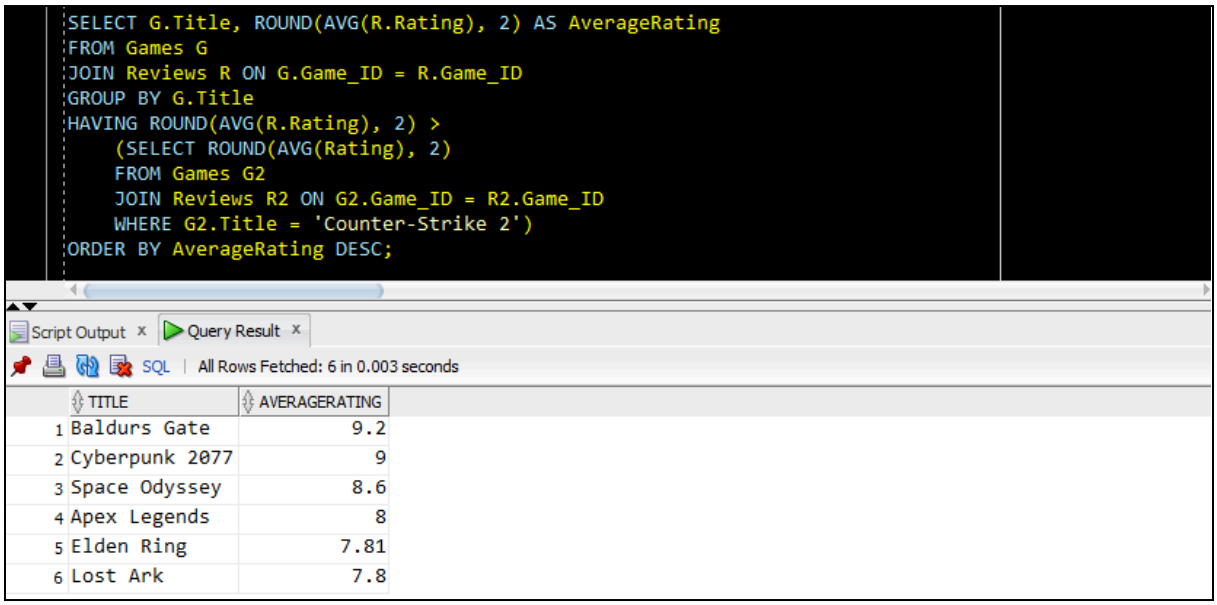
Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.11 seconds

	USER_ID	USERNAME	TITLE	HOURS_PLAYED	ACHIEVEMENTS_UNLOCKED	SAVE_GAME_STATE	LAST_PLAYED_DATE
1	1002	LukasHatchingMachine	Elden Ring	119	19	Warrior 109	05/01/2023
2	1003	Fire_FigherL	Elden Ring	309	32	Vagabond 129	25/12/2022
3	1004	cauholky122	Elden Ring	78	15	Thief 59	01/11/2022
4	1010	lukasczthegame	Elden Ring	33	7	Mage Level 40	05/12/2023
5	1011	FoorUkraine	Elden Ring	79	17	Samurai Level 76	22/02/2023
6	1015	kevinjeASIAT	Elden Ring	109	23	Samurai Level 99	14/12/2023
7	1017	kennyjirka	Elden Ring	10	3	Samurai Level 10	15/12/2023
8	1028	robloxkoncireal	Elden Ring	83	19	Prisoner Level 43	01/12/2023
9	1029	lila_robloxlike	Elden Ring	133	5	Bandit Level 56	11/12/2022
10	1030	fan_pagedodo	Elden Ring	77	22	Mage Level 65	05/09/2023

6.8 List all games that have higher rating than Counter-Strike 2

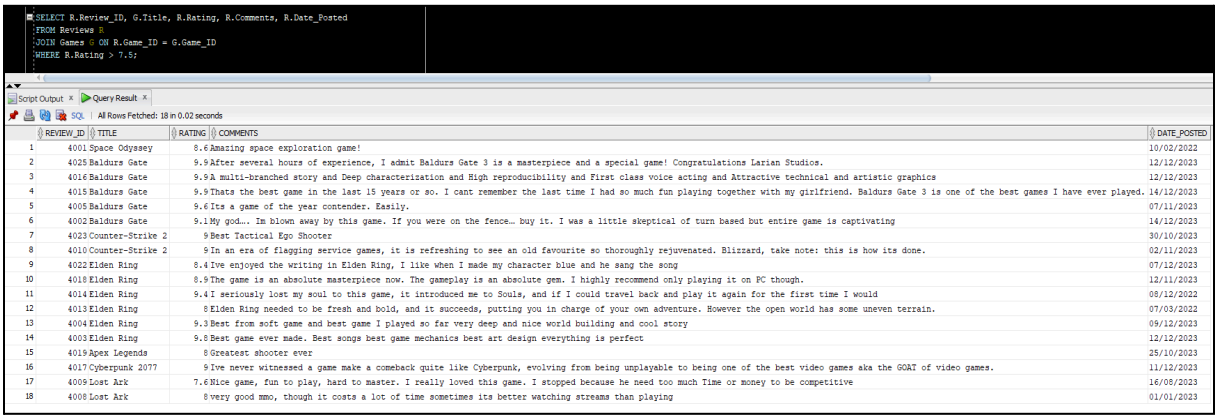
```
SELECT G.Title, ROUND(AVG(R.Rating), 2) AS AverageRating
FROM Games G
JOIN Reviews R ON G.Game_ID = R.Game_ID
GROUP BY G.Title
HAVING ROUND(AVG(R.Rating), 2) >
    (SELECT ROUND(AVG(Rating), 2)
    FROM Games G2
    JOIN Reviews R2 ON G2.Game_ID = R2.Game_ID
    WHERE G2.Title = 'Counter-Strike 2')
ORDER BY AverageRating DESC;
```



	TITLE	AVERAGERATING
1	Baldurs Gate	9.2
2	Cyberpunk 2077	9
3	Space Odyssey	8.6
4	Apex Legends	8
5	Elden Ring	7.81
6	Lost Ark	7.8

6.9 List all positive reviews

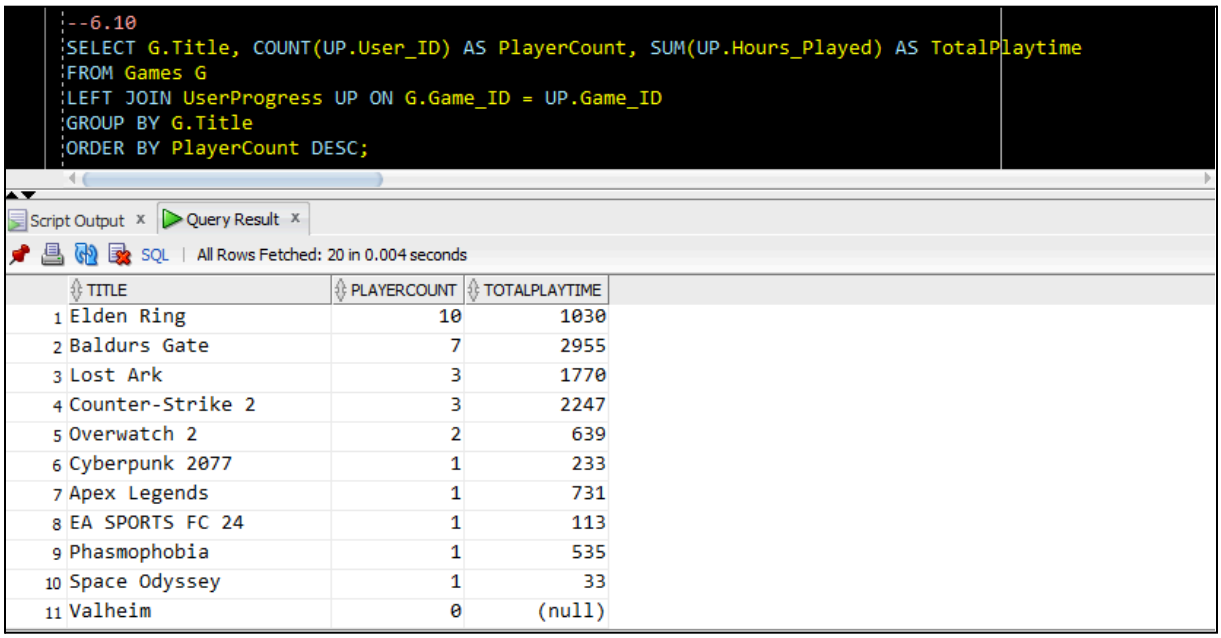
```
SELECT R.Review_ID, G.Title, R.Rating, R.Comments, R.Date_Posted
FROM Reviews R
JOIN Games G ON R.Game_ID = G.Game_ID
WHERE R.Rating > 7.5;
```



	REVIEW_ID	TITLE	RATING	COMMENTS	DATE_POSTED
1	4001	Space Odyssey	8.6	Amazing space exploration game!	10/02/2022
2	4025	Baldurs Gate	9.9	After several hours of experience, I admit Baldurs Gate 3 is a masterpiece and a special game! Congratulations Larian Studios.	12/12/2023
3	4016	Baldurs Gate	9.9	A multi-branched story and Deep characterization and High reproducibility and First class voice acting and Attractive technical and artistic graphics	12/12/2023
4	4015	Baldurs Gate	9.9	Thats the best game in the last 15 years or so. I cant remember the last time I had so much fun playing together with my girlfriend. Baldurs Gate 3 is one of the best games I have ever played.	14/12/2023
5	4005	Baldurs Gate	9.6	Its a game of the year contender. Easily.	07/11/2023
6	4002	Baldurs Gate	9.1	My god... Im blown away by this game. If you were on the fence… buy it. I was a little skeptical of turn based but entire game is captivating	14/12/2023
7	4023	Counter-Strike 2	9	Best Tactical Ego Shooter	30/10/2023
8	4010	Counter-Strike 2	9	In an era of flagging service games, it is refreshing to see an old favourite so thoroughly rejuvenated. Blizzard, take note: this is how its done.	02/11/2023
9	4022	Elden Ring	8.4	Ive enjoyed the writing in Elden Ring, I like when I made my character blue and he sang the song	07/12/2023
10	4018	Elden Ring	8.9	The game is an absolute masterpiece now. The gameplay is an absolute gem. I highly recommend only playing it on PC though.	12/11/2023
11	4014	Elden Ring	9.4	I seriously lost my soul to this game, it introduced me to Souls, and if I could travel back and play it again for the first time I would	08/12/2022
12	4013	Elden Ring	8	Elden Ring needed to be fresh and bold, and it succeeds, putting you in charge of your own adventure. However the open world has some uneven terrain.	07/03/2022
13	4004	Elden Ring	9.3	Best from soft game and best game I played so far very deep and nice world building and cool story	09/12/2023
14	4003	Elden Ring	9.8	Best game ever made. Best songs best game mechanics best art design everything is perfect	12/12/2023
15	4019	Apex Legends	8	Greatest shooter ever	25/10/2023
16	4017	Cyberpunk 2077	9	Ive never witnessed a game make a comeback quite like Cyberpunk, evolving from being unplayable to being one of the best video games aka the GOAT of video games.	11/12/2023
17	4009	Lost Ark	7.6	Nice game, fun to play, hard to master. I really loved this game. I stopped because he need too much Time or money to be competitive	16/08/2023
18	4008	Lost Ark	8	very good mmo, though it costs a lot of time sometimes its better watching streams than playing	01/01/2023

6.10 List player count and total playtime for each games

```
SELECT G.Title, COUNT(UP.User_ID) AS PlayerCount,
SUM(UP.Hours_Played) AS TotalPlaytime
FROM Games G
LEFT JOIN UserProgress UP ON G.Game_ID = UP.Game_ID
GROUP BY G.Title
ORDER BY PlayerCount DESC;
```



```
--6.10
SELECT G.Title, COUNT(UP.User_ID) AS PlayerCount, SUM(UP.Hours_Played) AS TotalPlaytime
FROM Games G
LEFT JOIN UserProgress UP ON G.Game_ID = UP.Game_ID
GROUP BY G.Title
ORDER BY PlayerCount DESC;
```

Script Output | Query Result

All Rows Fetched: 20 in 0.004 seconds

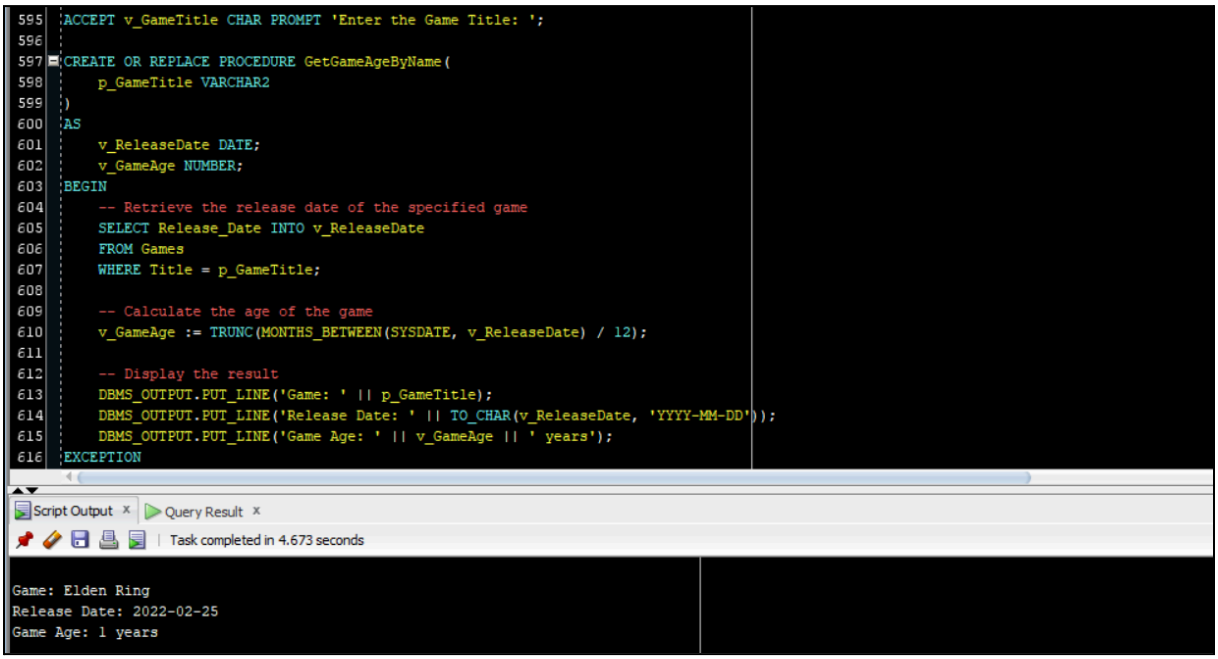
	TITLE	PLAYERCOUNT	TOTALPLAYTIME
1	Elden Ring	10	1030
2	Baldurs Gate	7	2955
3	Lost Ark	3	1770
4	Counter-Strike 2	3	2247
5	Overwatch 2	2	639
6	Cyberpunk 2077	1	233
7	Apex Legends	1	731
8	EA SPORTS FC 24	1	113
9	Phasmophobia	1	535
10	Space Odyssey	1	33
11	Valheim	0	(null)

7.0 Procedures

7.1 Get Age of Particular Game

```
ACCEPT v_GameTitle CHAR PROMPT 'Enter the Game Title: ';

CREATE OR REPLACE PROCEDURE GetGameAgeByName(p_GameTitle VARCHAR2)
AS
    v_ReleaseDate DATE;
    v_GameAge NUMBER;

    -- Declare a cursor
    CURSOR GameCursor IS
        SELECT Release_Date
        FROM Games
        WHERE Title = p_GameTitle;

BEGIN
    -- Open the cursor
    OPEN GameCursor;

    -- Fetch the result into v_ReleaseDate
    FETCH GameCursor INTO v_ReleaseDate;

    -- Check if the cursor fetched a row
    IF GameCursor%FOUND THEN
        v_GameAge := TRUNC(MONTHS_BETWEEN(SYSDATE, v_ReleaseDate) /
12);
        DBMS_OUTPUT.PUT_LINE('Game: ' || p_GameTitle);
        DBMS_OUTPUT.PUT_LINE('Release Date: ' ||
TO_CHAR(v_ReleaseDate, 'YYYY-MM-DD'));
        DBMS_OUTPUT.PUT_LINE('Game Age: ' || v_GameAge || ' years');
    ELSE
        DBMS_OUTPUT.PUT_LINE('Game ' || p_GameTitle || ' not
found.');
    END IF;

    -- Close the cursor
    CLOSE GameCursor;

EXCEPTION
    WHEN OTHERS THEN
        -- Close the cursor if an exception occurs
        IF GameCursor%ISOPEN THEN
            CLOSE GameCursor;
        END IF;
```

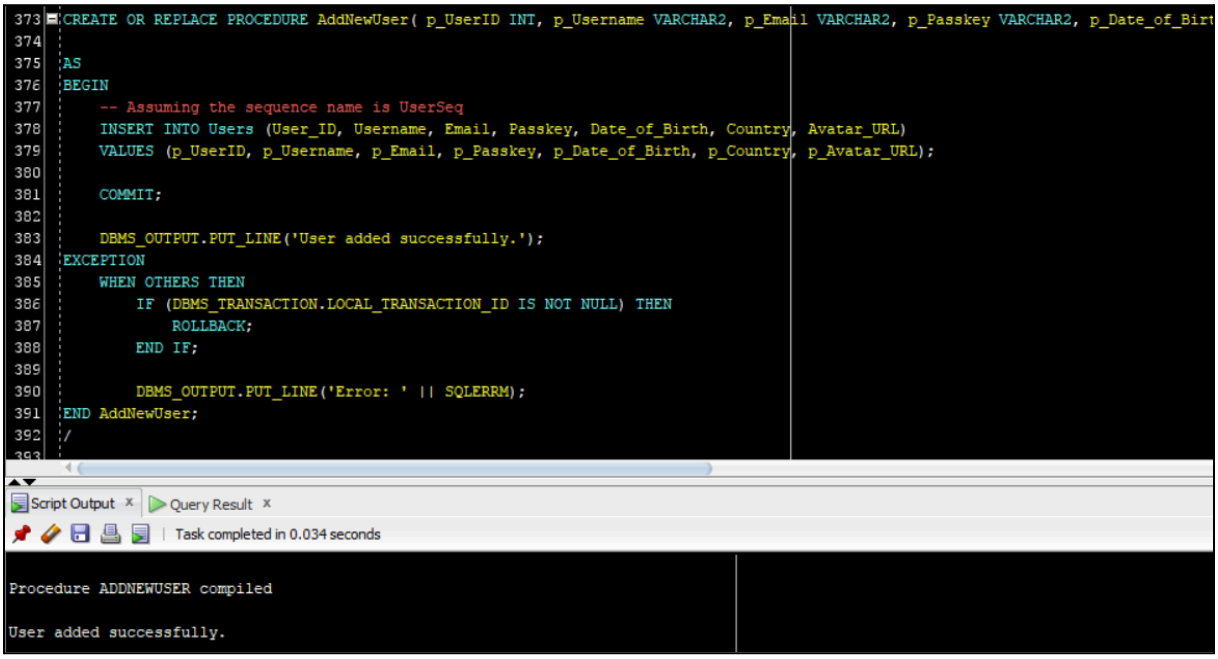
```
        DBMS_OUTPUT.PUT_LINE('Error: ' || SQLERRM);
END GetGameAgeByName;
/

-- Execute the procedure
EXEC GetGameAgeByName('&v_GameTitle');
```



7.2 Add New User Procedure

```
CREATE OR REPLACE PROCEDURE AddNewUser( p_UserID INT, p_Username
VARCHAR2, p_Email VARCHAR2, p_Passkey VARCHAR2, p_Date_of_Birth DATE,
p_Country VARCHAR2)
AS
BEGIN
    INSERT INTO Users (User_ID, Username, Email, Passkey,
Date_of_Birth, Country)
    VALUES (p_UserID, p_Username, p_Email, p_Passkey,
p_Date_of_Birth, p_Country);
    COMMIT;
    DBMS_OUTPUT.PUT_LINE('User added successfully.');
EXCEPTION
    WHEN OTHERS THEN
        IF (DBMS_TRANSACTION.LOCAL_TRANSACTION_ID IS NOT NULL) THEN
            ROLLBACK;
        END IF;
        DBMS_OUTPUT.PUT_LINE('Error: ' || SQLERRM);
END AddNewUser;
```

```
/-- Example
BEGIN
   AddNewUser( 1031,'Nazrin', 'nazz@example.com', 'password123',
TO_DATE('2002-01-01', 'YYYY-MM-DD'), 'Malaysia');
END;
/
```



7.3 Display Game Details Procedure

```
SET SERVEROUTPUT ON;
ACCEPT v_GameTitle CHAR PROMPT 'Enter the Game Title: ';
CREATE OR REPLACE PROCEDURE DisplayGameDetails ( p_GameTitle
VARCHAR2)
AS
    v_GameID INT;
    v_Title VARCHAR2(255);
    v_Genre VARCHAR2(255);
    v_ReleaseDate DATE;
    v_Publisher VARCHAR2(255);
    v_Platform VARCHAR2(255);
    v_About VARCHAR2(255);
BEGIN
    SELECT Game_ID, Title, Genre, Release_Date, Publisher, Platform,
About
    INTO v_GameID, v_Title, v_Genre, v_ReleaseDate, v_Publisher,
v_Platform, v_About
    FROM Games
    WHERE Title = p_GameTitle;
```

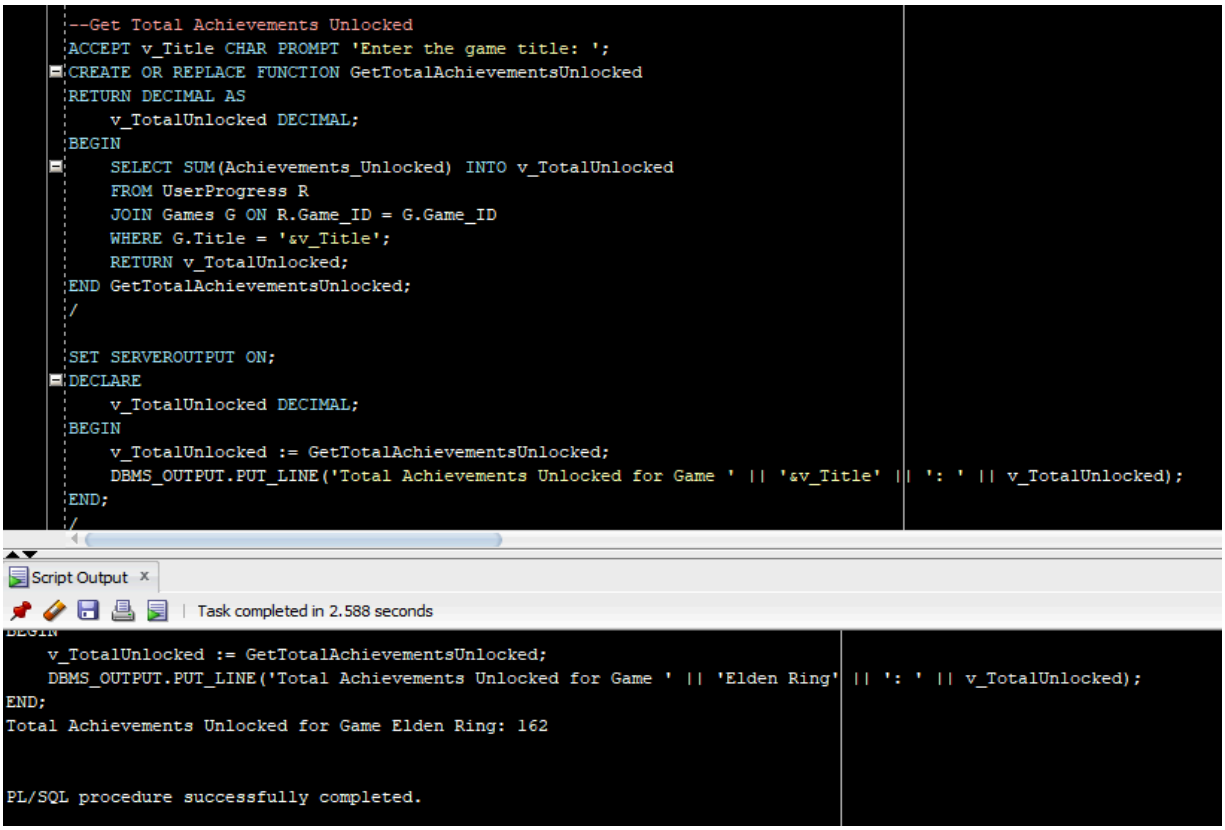
```
    DBMS_OUTPUT.PUT_LINE('Game ID: ' || v_GameID);
    DBMS_OUTPUT.PUT_LINE('Game Title: ' || v_Title);
    DBMS_OUTPUT.PUT_LINE('Genre ID: ' || v_Genre);
    DBMS_OUTPUT.PUT_LINE('Release Date: ' || TO_CHAR(v_ReleaseDate,
'YYYY-MM-DD'));
    DBMS_OUTPUT.PUT_LINE('Publisher: ' || v_Publisher);
    DBMS_OUTPUT.PUT_LINE('Platform: ' || v_Platform);
    DBMS_OUTPUT.PUT_LINE('About: ' || v_About);
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE('Game ' || p_GameTitle || ' not
found.');
    WHEN OTHERS THEN
        DBMS_OUTPUT.PUT_LINE('Error: ' || SQLERRM);
END DisplayGameDetails;
/
EXEC DisplayGameDetails('&v_GameTitle');
```

8.0 SQL Functions

8.1 Get Total Achievements Unlocked For Game

```
ACCEPT v_Title CHAR PROMPT 'Enter the game title: ';
CREATE OR REPLACE FUNCTION GetTotalAchievementsUnlocked
RETURN DECIMAL AS
    v_TotalUnlocked DECIMAL;
BEGIN
    SELECT SUM(Achievements_Unlocked) INTO v_TotalUnlocked
    FROM UserProgress R
    JOIN Games G ON R.Game_ID = G.Game_ID
    WHERE G.Title = '&v_Title';
    RETURN v_TotalUnlocked;
END GetTotalAchievementsUnlocked;
/
SET SERVEROUTPUT ON;
```

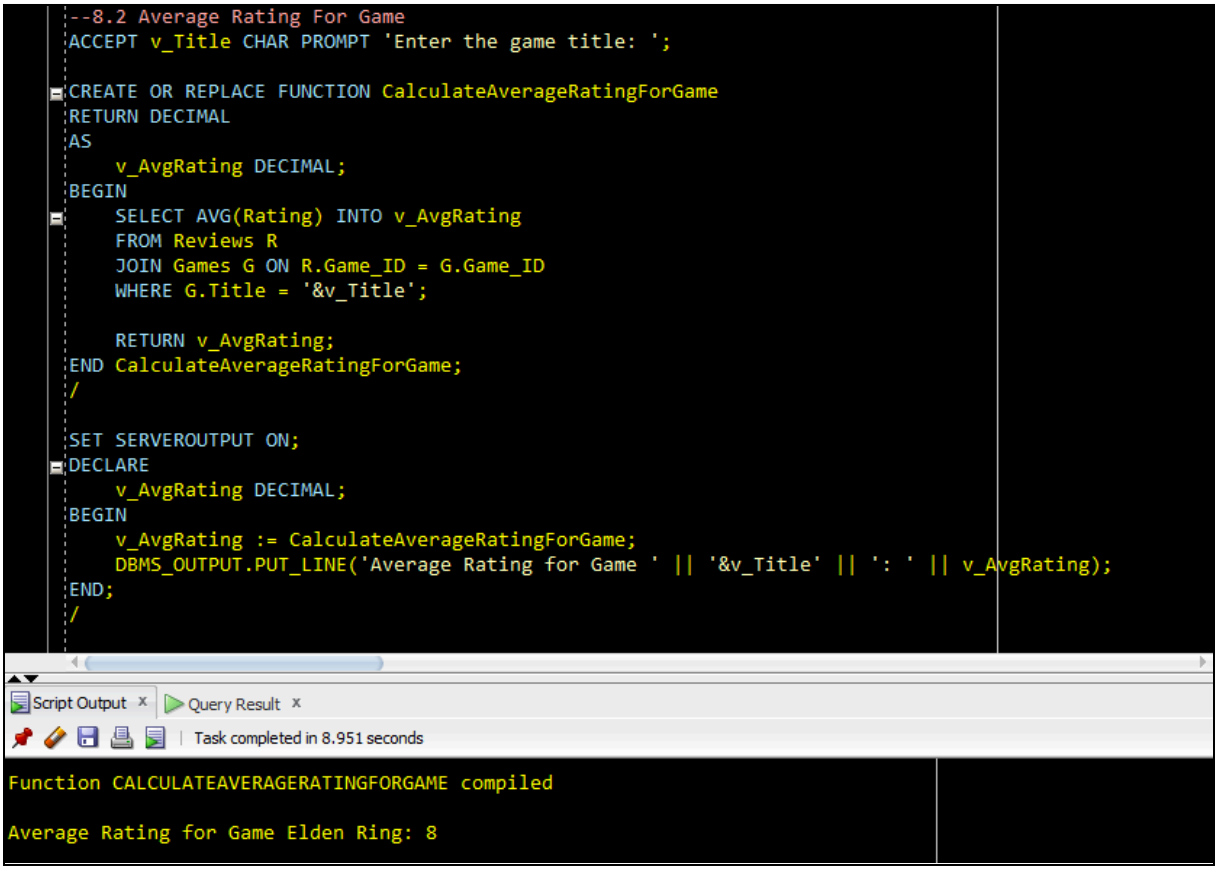
```
DECLARE
    v_TotalUnlocked DECIMAL;
BEGIN
    v_TotalUnlocked := GetTotalAchievementsUnlocked;
    DBMS_OUTPUT.PUT_LINE('Total Achievements Unlocked for Game ' ||
'&v_Title' || ': ' || v_TotalUnlocked);
END;
/
```



8.2 Average Rating For Game

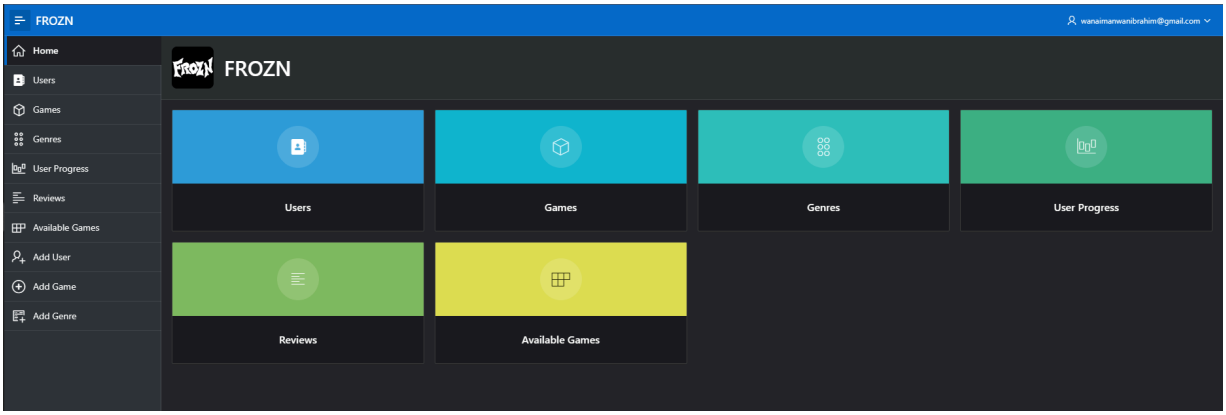
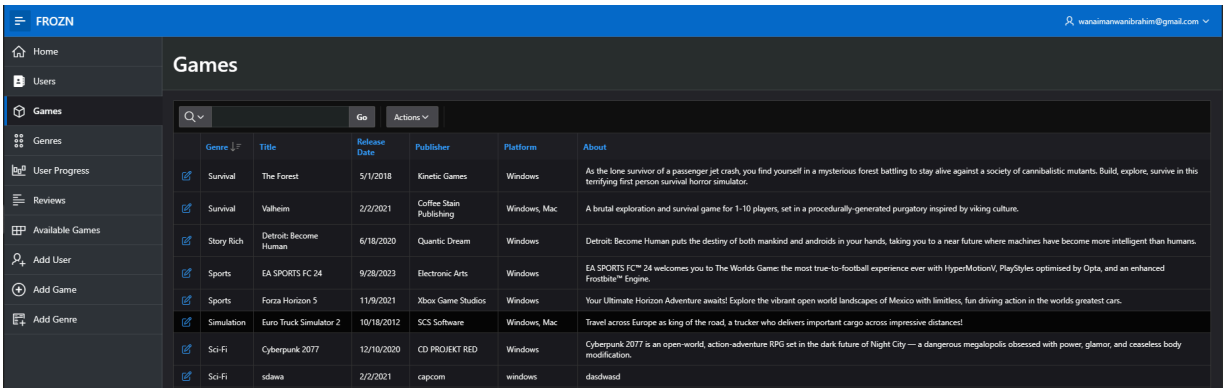
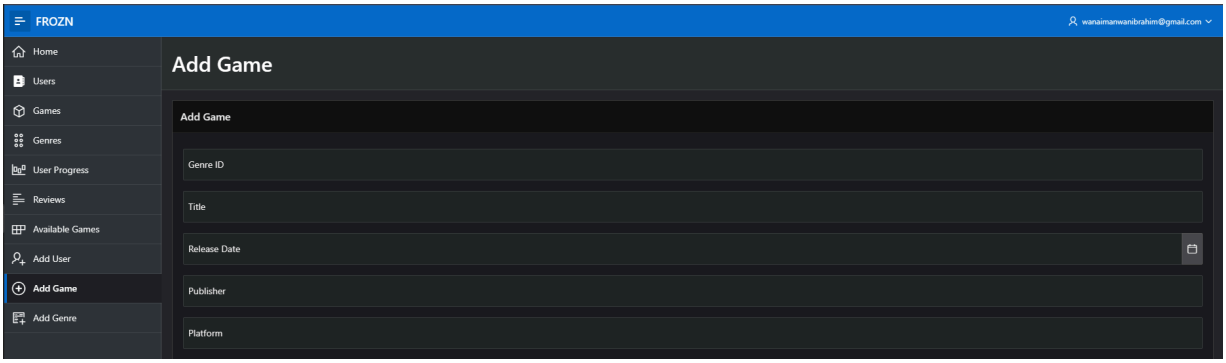
```
ACCEPT v_Title CHAR PROMPT 'Enter the game title: ';
CREATE OR REPLACE FUNCTION CalculateAverageRatingForGame
RETURN DECIMAL AS v_AvgRating DECIMAL;
BEGIN
    SELECT AVG(Rating) INTO v_AvgRating
    FROM Reviews R
    JOIN Games G ON R.Game_ID = G.Game_ID
    WHERE G.Title = '&v_Title';
    RETURN v_AvgRating;
END CalculateAverageRatingForGame;
/
```

```
SET SERVEROUTPUT ON;
DECLARE v_AvgRating DECIMAL;
BEGIN
    v_AvgRating := CalculateAverageRatingForGame;
    DBMS_OUTPUT.PUT_LINE('Average Rating for Game ' || '&v_Title' ||
': ' || v_AvgRating);
END;
/
```



9.0 Web Implementation

Link to website: [Gaming Platform System]

Account details

Username - wanaimanwanibrahim@gmail.com
Password - Admin001