```
In [76]: %load_ext sql
         %sql mysql://root:CR23acgt@localhost/project_mysticquest

         The sql extension is already loaded. To reload it, use:
           %reload_ext sql

In [77]: %%sql
         USE project_mysticquest;

          * mysql://root:***@localhost/project_mysticquest
         0 rows affected.
Out[77]: []

In [78]: %%sql
         SHOW TABLES;

          * mysql://root:***@localhost/project_mysticquest
         15 rows affected.
```

Out[78]:

Tables_in_project_mysticquest
chat
combat
dialogue
enemy
event
groupchat
guild
item
kingdom
npc
player
quest
ruler
team
transaction

```
In [79]: %%sql

         # Inflation Analysis: Track the average value of traded items over time to detect if the in-game economy is exp
         SELECT item.name, AVG(transaction.amount) AS averagePrice,
                CASE
                    WHEN AVG(transaction.amount) > item.price THEN 'inflation'
                    WHEN AVG(transaction.amount) < item.price THEN 'deflation'
                    ELSE 'stable'
                END AS economy_status
         FROM transaction
         JOIN item ON item.id = transaction.item_id
         GROUP BY item.name, item.price;

          * mysql://root:***@localhost/project_mysticquest
         45 rows affected.
```

name	averagePrice	economy_status
Greatsword of Heavenly Wrath	582.2500	inflation
Wyrm's Breath Wand	469.0000	inflation
Quicksilver Bullets	470.0000	inflation
Dagger of the Trickster	359.0000	inflation
Runic Vestments	445.7143	deflation
Scroll of Forgotten Knowledge	421.5000	inflation
Axe of the Moon Chieftain	726.0000	inflation
Ring of the Fallen	452.0000	inflation
Robe of the Sage	592.0000	inflation
Bread of the Wise	623.6667	deflation
Ring of the Moon	563.2500	inflation
Emerald Heart Ring	425.0000	inflation
Staff of Eldritch Power	478.0000	inflation
Chains of the Abyss	567.5000	deflation
Aegis of the Sun	605.2000	inflation
Bow of the Eternal Forest	622.7500	inflation
Lunar Tear Bracelet	294.3333	deflation
Boots of the Shadow Dancer	395.2222	inflation
Cursed Bone Necklace	522.5556	deflation
Earthshaker Hammer	325.4000	deflation
Ring of Arcane Mastery	776.7500	inflation
Golden Chalice of Eternity	264.3333	inflation
Dragonbone Greataxe	337.2500	deflation
Warhammer of the Earthshaker	466.2500	inflation
Rune-etched Crossbow	200.0000	deflation
Plaguebringer Scythe	476.3333	inflation
Robes of the Archmage	579.2000	deflation
Cloak of Shadows	447.8000	inflation
Ring of the Fallen Queen	703.8000	deflation
Dagger of Betrayal	466.7500	deflation
Champion's Greatsword	377.7143	deflation
Orb of the Soul Reaver	685.5000	inflation
Essence of the Wild	556.7500	inflation
Gauntlets of the Berserker	689.5000	inflation
Ring of the Fallen King	542.3333	inflation
Crossbow of Fiery Vengeance	246.1667	deflation
Titanium Gauntlet	141.0000	deflation
Rod of Wondrous Echoes	450.0000	deflation
Warrior's Battleaxe	552.5000	inflation
Quiver of the Wind	91.0000	deflation
Staff of the Archmage	580.1667	inflation
Thunderstrike Axe	56.0000	deflation
Harvest Moon Scepter	121.0000	deflation
Stormbringer Blade	600.0000	inflation
Grimoire of Lost Souls	675.0000	inflation

```sql
%%sql

#PvP Rankings: List players based on their performances in player-versus-player battles, potentially subdividin

SELECT
    player.first_name,
    player.level,
    COUNT(combat.winner_id) AS num_wins,
    CASE
        WHEN COUNT(combat.winner_id) > 3 THEN 'high pvp performance'
        ELSE ''
    END AS performance
```

```
FROM
    player
LEFT JOIN
    combat ON player.id = combat.winner_id
GROUP BY
    player.id
ORDER BY
    num_wins DESC;
```

 * mysql://root:***@localhost/project_mysticquest
184 rows affected.

Out[80]:

first_name	level	num_wins	performance
Zyralor	489	4	high pvp performance
Azalor	929	4	high pvp performance
Valyndra	977	3	
Jadefang	635	3	
Thundara	768	2	
Oromis	363	2	
Laelor	726	2	
Elanor	987	2	
Lythra	502	2	
Xirelle	869	2	
Zyraziel	762	2	
Illinor	899	2	
Elidora	807	2	
Isolde	528	2	
Orin	811	2	
Valdrick	955	2	
Thorgal	550	2	
Raelan	936	2	
Azalor	590	2	
Thaelis	874	2	
Thundara	355	2	
Veyla	205	2	
Lythra	903	2	
Veyla	941	2	
Gwynara	886	2	
Elidora	395	1	
Oberion	997	1	
Zephyra	288	1	
Serafelle	787	1	
Nymriel	488	1	
Keldra	418	1	
Thera	611	1	
Valeria	285	1	
Thaldor	392	1	
Xyphera	848	1	
Elira	178	1	
Faenar	713	1	
Thorgath	745	1	
Seraphix	45	1	
Raelan	557	1	
Aralyn	81	1	
Thorgath	102	1	
Faelthorn	268	1	
Zephyra	233	1	
Oromis	394	1	
Thaldor	428	1	
Tyrndar	389	1	

Valyndra	931	1
Lyrielle	394	1
Aryndis	200	1
Thorgal	1	1
Lyrielle	276	1
Veyla	51	1
Gilean	535	1
Vyktor	966	1
Naelor	375	1
Xyra	429	1
Aethor	365	1
Faelthorn	902	1
Shaelis	268	1
Daelis	126	1
Faenar	538	1
Xaradra	91	1
Thaldor	166	1
Grundor	536	1
Valyndra	556	1
Runorin	504	1
Gorgrim	633	1
Valyndra	896	1
Aralyn	926	1
Elidora	366	1
Grundor	864	1
Daelis	875	1
Zyraziel	879	1
Elira	430	1
Aryndis	7	1
Lythor	672	1
Nymriel	637	1
Lyrielle	70	1
Zyraziel	870	0
Belthorn	27	0
Zephyrix	172	0
Sarthon	422	0
Aeriana	793	0
Xaradra	372	0
Veyla	203	0
Xaradra	712	0
Goromir	431	0
Orik	400	0
Illinor	940	0
Solandria	900	0
Sarthon	139	0
Endora	134	0
Lythor	680	0
Thorgrim	896	0
Elidora	72	0
Raelis	588	0
Goromir	222	0
Zaela	441	0
Runorin	744	0
Thaelis	268	0
Selendis	171	0

Name	Value	Count
Aralyn	750	0
Illinor	487	0
Aeriana	832	0
Valyndra	819	0
Loralei	215	0
Zephyra	790	0
Valyndra	902	0
Elidora	511	0
Lunarion	412	0
Thera	744	0
Loralei	326	0
Aerendir	856	0
Elira	590	0
Elidora	70	0
Jadefang	534	0
Loralei	434	0
Thera	774	0
Quorlinn	212	0
Delgath	90	0
Seraphix	156	0
Thaelen	748	0
Grundor	445	0
Veyla	720	0
Oberion	764	0
Veylan	258	0
Isolde	607	0
Runorin	377	0
Aralyn	913	0
Isolde	607	0
Aethor	913	0
Saphyra	947	0
Thera	349	0
Valyndra	132	0
Aerendir	766	0
Zyraziel	132	0
Thaelis	848	0
Aethor	760	0
Nymriel	692	0
Thaelis	411	0
Belthorn	576	0
Vyktor	340	0
Keldra	16	0
Serafelle	497	0
Xirelle	484	0
Zephyrix	97	0
Ulfrik	731	0
Orin	554	0
Isolde	845	0
Thorgath	740	0
Xyralis	896	0
Thaelis	832	0
Thorgrim	890	0
Faenar	610	0
Endora	616	0
Raelan	638	0

Morwyn	414	0
Shaelis	782	0
Goromir	411	0
Elidora	57	0
Gorgrim	159	0
Keldra	967	0
Quorlinn	733	0
Ulfrik	713	0
Ulfrik	827	0
Zandalar	637	0
Gorgrim	398	0
Aralyn	802	0
Elira	478	0
Elidora	7	0
Tyrndar	746	0
Xyphera	659	0
Xyralis	373	0
Shaelis	161	0
Drakan	593	0
Goromir	659	0
Elandria	140	0
Xyra	714	0
Aryndis	883	0
Xyralis	120	0
Jadefang	743	0
Thera	998	0
Morwyn	511	0

In [109...

```sql
%%sql

#Rare Item Ownership: List players who own the rarest items in the game, possibly indicating either advanced ga
SELECT player.first_name, player.experience, item.name AS item_owned
FROM player
JOIN item ON item.id = player.item_id
WHERE item.required_level > 700;
```

* mysql://root:***@localhost/project_mysticquest
83 rows affected.

Out[109]:

first_name	experience	item_owned
Zyraziel	71	Aegis of the Sun
Elidora	335	Staff of Eldritch Power
Belthorn	458	Plaguebringer Scythe
Zephyrix	506	Quiver of the Wind
Oberion	668	Warhammer of the Earthshaker
Xaradra	236	Gauntlets of the Berserker
Veyla	398	Harvest Moon Scepter
Xaradra	742	Dagger of Betrayal
Sarthon	285	Earthshaker Hammer
Nymriel	588	Cloak of Shadows
Keldra	982	Scroll of Forgotten Knowledge
Thera	174	Titanium Gauntlet
Valeria	26	Cloak of Shadows
Thorgrim	412	Essence of the Wild
Elidora	428	Gauntlets of the Berserker
Raelis	580	Rod of Wondrous Echoes
Faenar	184	Essence of the Wild
Aralyn	877	Plaguebringer Scythe
Laelor	403	Chains of the Abyss
Illinor	246	Harvest Moon Scepter

Valyndra	479	Aegis of the Sun
Thera	214	Gauntlets of the Berserker
Aralyn	677	Warhammer of the Earthshaker
Elidora	276	Scroll of Forgotten Knowledge
Thorgath	407	Dagger of Betrayal
Isolde	594	Cloak of Shadows
Elidora	966	Axe of the Moon Chieftain
Thaldor	105	Staff of Eldritch Power
Tyrndar	281	Dagger of Betrayal
Jadefang	7	Staff of Eldritch Power
Loralei	908	Rod of Wondrous Echoes
Thera	417	Warhammer of the Earthshaker
Valyndra	915	Dagger of Betrayal
Orin	957	Staff of Eldritch Power
Quorlinn	628	Wyrm's Breath Wand
Valdrick	699	Harvest Moon Scepter
Delgath	456	Bread of the Wise
Aryndis	267	Robe of the Sage
Raelan	378	Plaguebringer Scythe
Thorgal	728	Gauntlets of the Berserker
Seraphix	716	Plaguebringer Scythe
Lyrielle	467	Chains of the Abyss
Veylan	937	Titanium Gauntlet
Veyla	557	Earthshaker Hammer
Aethor	746	Harvest Moon Scepter
Gilean	463	Quiver of the Wind
Thera	422	Harvest Moon Scepter
Aerendir	87	Essence of the Wild
Zyraziel	417	Warrior's Battleaxe
Aethor	985	Gauntlets of the Berserker
Thaelis	404	Quiver of the Wind
Faelthorn	99	Wyrm's Breath Wand
Serafelle	15	Harvest Moon Scepter
Xirelle	635	Warrior's Battleaxe
Daelis	882	Bread of the Wise
Faenar	361	Essence of the Wild
Thundara	181	Staff of Eldritch Power
Ulfrik	218	Bread of the Wise
Thaldor	623	Staff of Eldritch Power
Isolde	993	Harvest Moon Scepter
Thorgath	17	Robe of the Sage
Azalor	151	Dagger of Betrayal
Thaelis	942	Rod of Wondrous Echoes
Lythra	80	Staff of Eldritch Power
Faenar	69	Warhammer of the Earthshaker
Raelan	447	Harvest Moon Scepter
Morwyn	540	Quiver of the Wind
Elidora	187	Dagger of Betrayal
Grundor	900	Wyrm's Breath Wand
Zyraziel	51	Chains of the Abyss
Goromir	938	Bread of the Wise
Elira	153	Wyrm's Breath Wand
Gorgrim	405	Warrior's Battleaxe
Gwynara	678	Gauntlets of the Berserker
Ulfrik	896	Dagger of Betrayal

Tyrndar	621	Warhammer of the Earthshaker
Xyralis	218	Chains of the Abyss
Goromir	935	Bread of the Wise
Elandria	279	Wyrm's Breath Wand
Xyra	343	Quiver of the Wind
Lyrielle	548	Titanium Gauntlet
Aryndis	517	Earthshaker Hammer
Morwyn	391	Axe of the Moon Chieftain

In [82]:
```sql
%%sql

# Popular Locations: Find out which game zones or areas are most frequented by players, which could help in pla

SELECT kingdom.name, COUNT(player.id) AS visit_count
FROM kingdom
JOIN player ON kingdom.id = player.kingdom_id
GROUP BY kingdom.name
ORDER BY visit_count DESC;
```

 * mysql://root:***@localhost/project_mysticquest
4 rows affected.

Out[82]:

name	visit_count
Elphora	59
Valoria	51
Cimmeria	40
Orynthia	34

In [106...
```sql
%%sql

#Quest Difficulty vs. Player Level: Analyze the levels of players who complete quests of varying difficulties t

SELECT
    quest.difficulty,
    COUNT(player.id) AS num_players,
    AVG(player.level) AS avg_player_level,
    MAX(player.level) AS max_player_level,
    MIN(player.level) AS min_player_level
FROM
    quest
LEFT JOIN
    player ON quest.difficulty <= player.level
GROUP BY
    quest.difficulty
ORDER BY
    quest.difficulty;
```

 * mysql://root:***@localhost/project_mysticquest
123 rows affected.

Out[106]:

difficulty	num_players	avg_player_level	max_player_level	min_player_level
6	183	545.8470	998	7
10	181	551.8011	998	16
11	181	551.8011	998	16
13	181	551.8011	998	16
18	180	554.7778	998	27
26	180	554.7778	998	27
36	179	557.7263	998	45
38	179	557.7263	998	45
41	179	557.7263	998	45
45	179	557.7263	998	45
51	178	560.6067	998	51
75	173	574.9595	998	81
82	172	577.8314	998	90
87	172	577.8314	998	90
95	170	583.5647	998	97
97	170	583.5647	998	97
100	169	586.4438	998	102
106	168	589.3274	998	120

107	168	589.3274	998	120
110	168	589.3274	998	120
112	168	589.3274	998	120
126	167	592.1377	998	126
133	164	600.5915	998	134
135	163	603.4540	998	139
142	161	609.2174	998	156
143	161	609.2174	998	156
147	161	609.2174	998	156
153	161	609.2174	998	156
155	161	609.2174	998	156
161	159	614.8994	998	161
172	156	623.5321	998	172
189	154	629.3571	998	200
192	154	629.3571	998	200
200	154	629.3571	998	200
201	153	632.1634	998	203
208	151	637.8344	998	212
209	151	637.8344	998	212
223	148	646.3784	998	233
242	147	649.1905	998	258
244	147	649.1905	998	258
245	147	649.1905	998	258
249	147	649.1905	998	258
256	147	649.1905	998	258
257	147	649.1905	998	258
281	142	662.6268	998	285
287	141	665.3050	998	288
303	140	668.0000	998	326
311	140	668.0000	998	326
352	137	675.2190	998	355
358	136	677.5735	998	363
364	135	679.9037	998	365
379	129	694.2558	998	389
397	124	706.4113	998	398
402	122	711.4508	998	411
403	122	711.4508	998	411
463	109	745.6055	998	478
470	109	745.6055	998	478
472	109	745.6055	998	478
473	109	745.6055	998	478
478	109	745.6055	998	478
487	107	750.5514	998	487
506	101	765.7624	998	511
509	101	765.7624	998	511
511	101	765.7624	998	511
523	99	770.9091	998	528
528	99	770.9091	998	528
553	93	786.0108	998	554
554	93	786.0108	998	554
573	90	793.6889	998	576
584	89	796.1348	998	588
587	89	796.1348	998	588
599	85	805.8235	998	607
603	85	805.8235	998	607

609	83	810.6145	998	610
610	83	810.6145	998	610
612	81	815.5556	998	616
613	81	815.5556	998	616
615	162	815.5556	998	616
619	80	818.0500	998	633
624	80	818.0500	998	633
645	75	830.1867	998	659
646	75	830.1867	998	659
653	75	830.1867	998	659
676	72	837.1389	998	680
687	71	839.3521	998	692
690	71	839.3521	998	692
697	70	841.4571	998	712
709	70	841.4571	998	712
712	70	841.4571	998	712
730	64	853.1875	998	731
731	64	853.1875	998	731
745	58	864.9828	998	745
746	57	867.0877	998	746
751	54	873.7037	998	760
753	54	873.7037	998	760
757	54	873.7037	998	760
762	53	875.8491	998	762
764	52	878.0385	998	764
773	49	884.8980	998	774
775	48	887.2083	998	782
782	48	887.2083	998	782
794	44	896.2273	998	802
809	42	900.5952	998	811
814	41	902.7805	998	819
818	82	902.7805	998	819
826	40	904.8750	998	827
832	78	906.8718	998	832
842	37	910.9189	998	845
843	37	910.9189	998	845
852	34	916.5588	998	856
858	33	918.3939	998	864
886	26	930.5000	998	886
898	21	939.4762	998	899
906	16	951.4375	998	913
908	16	951.4375	998	913
916	14	956.9286	998	926
919	14	956.9286	998	926
949	7	978.1429	998	955
956	6	982.0000	998	966
983	3	994.0000	998	987
989	2	997.5000	998	997
991	2	997.5000	998	997
993	2	997.5000	998	997

In [84]:
```sql
%%sql

#Economic Imbalance: Detect players who have a disproportionate amount of in-game currency compared to their ac

SELECT player.id, player.first_name, player.level, player.gold,
       (player.gold / player.level) AS currency_per_level
```

```sql
FROM player
WHERE (player.gold / player.level) > 100;
```

* mysql://root:***@localhost/project_mysticquest
1 rows affected.

Out[84]:

id	first_name	level	gold	currency_per_level
84	Thorgal	1	268	268.0000

In [85]:
```sql
%%sql

#Trade Partners: Identify frequent trade partnerships between players. Are the same players often involved in h

SELECT player1, player2, trade_count, total_traded
FROM (
    SELECT
        transaction.sender_id AS player1,
        transaction.receiver_id AS player2,
        COUNT(*) AS trade_count,
        SUM(transaction.amount) AS total_traded
    FROM transaction
    GROUP BY player1, player2
    HAVING trade_count > 10 OR total_traded > 500
) AS trade_partnerships
ORDER BY trade_count DESC;
```

* mysql://root:***@localhost/project_mysticquest
88 rows affected.

Out[85]:

player1	player2	trade_count	total_traded
79	660	1	912
667	501	1	961
351	668	1	685
641	101	1	726
861	713	1	694
900	54	1	916
143	91	1	603
68	234	1	731
149	504	1	501
386	248	1	964
460	464	1	918
517	1000	1	787
580	335	1	680
501	673	1	854
38	444	1	633
47	447	1	645
33	615	1	625
481	728	1	594
194	956	1	675
438	758	1	625
948	47	1	826
819	995	1	538
465	328	1	700
261	433	1	735
268	31	1	595
551	669	1	606
910	964	1	694
608	572	1	918
391	851	1	516
704	90	1	811
602	524	1	537
306	587	1	947
11	816	1	791
460	463	1	595
733	449	1	798
187	797	1	963
399	693	1	993

399	693	1	993
971	415	1	678
880	207	1	736
862	577	1	712
909	261	1	654
642	58	1	622
774	375	1	865
164	867	1	943
723	329	1	696
835	541	1	585
201	788	1	890
805	259	1	707
229	453	1	931
548	307	1	851
155	406	1	512
430	243	1	866
392	658	1	614
648	3	1	652
467	567	1	539
621	627	1	787
122	759	1	912
124	499	1	535
687	3	1	722
477	971	1	550
825	659	1	613
193	735	1	720
725	740	1	745
299	118	1	872
914	343	1	548
498	903	1	620
87	77	1	526
106	672	1	600
219	800	1	925
138	137	1	675
932	386	1	748
56	883	1	734
785	92	1	907
325	131	1	876
380	356	1	539
596	650	1	663
597	476	1	691
249	752	1	657
654	757	1	799
372	932	1	871
682	515	1	982
233	714	1	529
933	751	1	739
455	723	1	852
10	476	1	867
922	641	1	851
988	542	1	564
293	605	1	532

In [86]:
```sql
%%sql

#Quest Rewards Analysis: Determine the average value of rewards from different quests to see which ones are mos
```

```
SELECT name, reward
FROM quest
ORDER BY reward DESC;
```

* mysql://root:***@localhost/project_mysticquest
126 rows affected.

Out[86]:

name	reward
Thundara	998
Zephyra	993
Valeria	981
Thaelis	978
Raelan	971
Selendis	969
Valthor	957
Belthorn	955
Lyrielle	953
Shaelis	939
Elira	937
Gilean	933
Nymriel	920
Thaelen	916
Daelis	906
Elandria	896
Azalor	882
Oromis	876
Xyphera	875
Isolde	871
Qelthar	867
Solandria	865
Loralei	838
Thaldor	809
Aryndis	809
Sarthon	809
Thorgrim	787
Xyralis	780
Solandria	770
Thorgal	768
Kyrion	757
Selendis	756
Lythra	752
Thaldor	749
Delgath	739
Zephyrix	738
Raelthorn	728
Seraphix	726
Xyphera	711
Orik	708
Orifel	708
Runorin	704
Grundor	701
Nymriel	696
Thundara	692
Lyrielle	686
Thaldor	667
Aryndis	665
Loralei	660
Raelis	632

Veylan	620
Quorlinn	617
Solandria	613
Seraphix	602
Orifel	599
Oberion	595
Keldra	578
Elanor	568
Aryndis	568
Valdrick	561
Raelan	546
Lythra	537
Seraphix	523
Orifel	514
Nymriel	509
Xyphera	483
Thaldor	480
Elandria	476
Thaelen	457
Selendis	450
Serafelle	445
Thorgal	435
Thaelis	419
Aryndis	415
Valeria	406
Delgath	402
Zyralor	390
Endora	389
Thundara	388
Ulfrik	382
Elira	377
Raelan	371
Aralyn	370
Lythor	365
Valdrick	357
Xyra	356
Xyralis	352
Caelthor	350
Thera	332
Xyphera	329
Thorgrim	318
Zephyra	316
Lyrielle	308
Oberion	308
Lyrielle	306
Orifel	305
Azalor	297
Solandria	295
Ulfrik	283
Delgath	263
Oberion	260
Ashara	243
Oromis	242
Shaelis	208

Isolde	199
Keldra	195
Thaelis	193
Toraell	190
Lyrielle	179
Seraphix	177
Runorin	161
Kyrion	144
Zephyrix	136
Faelthorn	116
Vyktor	103
Saphyra	102
Vyktor	100
Kyrion	95
Jadefang	88
Gwynara	86
Runorin	74
Shaelis	43
Tyrndar	43
Zandalar	28
Sarthon	24
Thaelis	15

In [87]:
```sql
%%sql

#Level Distribution: Examine the distribution of player levels to understand the balance between newcomers, mid

SELECT
    CASE
        WHEN level <= 10 THEN 'Newcomer'
        WHEN level <= 20 THEN 'Mid-Level'
        ELSE 'High-Level'
    END AS level_range,
    COUNT(*) AS player_count
FROM
    player
GROUP BY
    level_range
ORDER BY
    level_range;
```

 * mysql://root:***@localhost/project_mysticquest
3 rows affected.

Out[87]:

level_range	player_count
High-Level	180
Mid-Level	1
Newcomer	3

In [88]:
```sql
%%sql

#Guild Affiliation: Examine the distribution of players in various guilds to find out which guilds are the most

SELECT name, SUM(members) AS total_members,
    CASE
        WHEN SUM(members) > 50 THEN 'popular'
        WHEN SUM(members) < 5 THEN 'exclusive'
        ELSE '---'
    END AS guild_status
FROM guild
GROUP BY name
ORDER BY total_members DESC;
```

 * mysql://root:***@localhost/project_mysticquest
43 rows affected.

name	total_members	guild_status
Wisdom Weavers	976	popular
Moonlit Mystics	966	popular
Frostbite Clan	956	popular
Knights of Valor	900	popular
Desert Nomads	897	popular
Elemental Lords	869	popular
Archmage Assembly	847	popular
The Silent Footsteps	841	popular
The Righteous	836	popular
Silver Lances	801	popular
Spirit Guardians	769	popular
Gold Brokers	748	popular
Defenders of Destiny	728	popular
Ocean's Children	727	popular
Council of Elders	691	popular
Nature's Whisper	680	popular
Hands of Fate	673	popular
The Undying	655	popular
Abyss Watchers	649	popular
Emerald Enchanters	615	popular
Dragon Slayers	597	popular
The Forsaken	584	popular
Storm Riders	582	popular
Heroes of Harmony	550	popular
Merchant Princes	518	popular
Crypt Crawlers	465	popular
Heavenly Healers	457	popular
Circle of Druids	412	popular
Sun Warriors	412	popular
Mind Over Matter	411	popular
Artisans of Alchemy	390	popular
Heart of Courage	297	popular
Heralds of Hope	291	popular
Shadow Society	279	popular
Prophets of Doom	268	popular
Seekers of Truth	166	popular
Thieves of Time	134	popular
The Wanderers	126	popular
Dusk to Dawn	113	popular
Starborn Seekers	99	popular
Guardians of Light	34	---
Mercenaries of Fortune	13	---
Elixir Masters	1	exclusive

In [89]:
```sql
%%sql

#Time of Play: Find out what times of day are the most popular for playing, which could help in scheduling in-g

SELECT
    HOUR(event_date) AS play_hour,
    COUNT(*) AS total_events_per_hour
FROM
    event
GROUP BY
    play_hour
ORDER BY
    total_events_per_hour DESC;
```

 * mysql://root:***@localhost/project_mysticquest
24 rows affected.

play_hour	total_events_per_hour
0	8
13	8
14	7
4	7
15	7
16	6
21	6
7	5
1	4
5	4
17	4
12	4
3	4
22	4
2	4
19	4
23	3
9	3
11	3
20	3
8	3
6	2
18	2
10	2

In [90]:

```sql
%%sql

#Time-to-Completion: Calculate the average time it takes for players to complete different quests. This could h

SELECT completition_time, name FROM quest
ORDER BY completition_time DESC;
```

 * mysql://root:***@localhost/project_mysticquest
126 rows affected.

Out[90]:

completition_time	name
998	Qelthar
995	Selendis
983	Zephyrix
973	Raelthorn
962	Thorgal
959	Elira
945	Lyrielle
901	Raelan
871	Raelan
870	Delgath
864	Delgath
844	Nymriel
841	Thorgal
831	Elandria
814	Aryndis
814	Oberion
807	Shaelis
794	Aryndis
790	Lythra
783	Selendis
781	Thaelis
779	Orifel
772	Zephyrix

772	Zephyrix	
743	Isolde	
742	Xyphera	
741	Thera	
740	Seraphix	
738	Xyralis	
735	Orifel	
730	Veylan	
725	Kyrion	
723	Runorin	
715	Serafelle	
689	Xyphera	
688	Thundara	
686	Nymriel	
682	Keldra	
672	Azalor	
671	Thundara	
661	Vyktor	
658	Valdrick	
649	Tyrndar	
645	Thorgrim	
628	Selendis	
625	Ulfrik	
617	Zandalar	
601	Elira	
593	Shaelis	
592	Shaelis	
591	Isolde	
588	Azalor	
567	Kyrion	
563	Thaldor	
551	Toraell	
541	Zyralor	
530	Valdrick	
526	Valeria	
526	Thorgrim	
513	Thaelen	
509	Ashara	
494	Loralei	
492	Orifel	
484	Valthor	
483	Solandria	
474	Runorin	
466	Thaldor	
448	Vyktor	
427	Delgath	
425	Quorlinn	
418	Seraphix	
418	Aryndis	
416	Gilean	
416	Xyphera	
393	Lyrielle	
389	Thaelis	
386	Aralyn	
379	Keldra	

342	Belthorn
340	Daelis
336	Loralei
331	Oberion
319	Saphyra
319	Aryndis
313	Nymriel
297	Oberion
289	Caelthor
281	Xyralis
280	Jadefang
278	Elandria
276	Thaelis
262	Orik
257	Seraphix
249	Runorin
248	Oromis
244	Sarthon
243	Lyrielle
240	Lythor
239	Sarthon
232	Thaldor
211	Thaelen
196	Zephyra
190	Kyrion
178	Solandria
175	Solandria
166	Orifel
164	Faelthorn
161	Thaelis
160	Raelan
147	Seraphix
138	Thaldor
137	Oromis
128	Ulfrik
117	Valeria
108	Xyphera
94	Lyrielle
81	Elanor
78	Gwynara
70	Zephyra
57	Xyra
55	Lyrielle
52	Raelis
36	Thundara
35	Grundor
26	Solandria
20	Lythra
19	Endora

In [91]:
```sql
%%sql

#Top Traded Items: Identify which items are most commonly traded or sold in-game, providing insight into what i

SELECT
    item.name AS item_name,
    transaction.item_id,
    COUNT(*) AS num_transactions
```

```sql
FROM
    transaction
JOIN
    item ON item.id = transaction.item_id
GROUP BY
    item_id, item_name
ORDER BY
    num_transactions DESC;
```

 * mysql://root:***@localhost/project_mysticquest
45 rows affected.

Out[91]:

item_name	item_id	num_transactions
Cursed Bone Necklace	33	9
Boots of the Shadow Dancer	45	9
Dragonbone Greataxe	1	8
Runic Vestments	31	7
Champion's Greatsword	4	7
Scroll of Forgotten Knowledge	13	6
Quicksilver Bullets	25	6
Dagger of the Trickster	19	6
Crossbow of Fiery Vengeance	16	6
Ring of the Fallen	20	6
Chains of the Abyss	36	6
Golden Chalice of Eternity	22	6
Plaguebringer Scythe	29	6
Staff of the Archmage	15	6
Ring of the Fallen Queen	35	5
Earthshaker Hammer	46	5
Cloak of Shadows	30	5
Robes of the Archmage	32	5
Aegis of the Sun	11	5
Ring of the Moon	14	4
Bow of the Eternal Forest	12	4
Ring of Arcane Mastery	5	4
Greatsword of Heavenly Wrath	26	4
Warhammer of the Earthshaker	44	4
Dagger of Betrayal	23	4
Orb of the Soul Reaver	42	4
Essence of the Wild	8	4
Gauntlets of the Berserker	18	4
Warrior's Battleaxe	7	4
Wyrm's Breath Wand	43	4
Lunar Tear Bracelet	6	3
Ring of the Fallen King	21	3
Bread of the Wise	2	3
Robe of the Sage	27	2
Staff of Eldritch Power	24	2
Emerald Heart Ring	39	2
Titanium Gauntlet	41	2
Axe of the Moon Chieftain	28	1
Rod of Wondrous Echoes	17	1
Quiver of the Wind	37	1
Rune-etched Crossbow	9	1
Thunderstrike Axe	3	1
Harvest Moon Scepter	34	1
Stormbringer Blade	10	1
Grimoire of Lost Souls	40	1

In [92]: `%%sql`

```
#Time of Play: Find out what times of day are the most popular for playing, which could help in scheduling in-g
SELECT
    DATE(event_date) AS play_date,
    COUNT(*) AS amount_events,
    CASE
        WHEN COUNT(*) > 1 THEN 'frequent'
        ELSE 'not frequent'
    END AS event_frequency
FROM
    event
GROUP BY
    DATE(event_date)
ORDER BY
    amount_events DESC;
```

 * mysql://root:***@localhost/project_mysticquest
104 rows affected.

Out[92]:

play_date	amount_events	event_frequency
2022-09-18	2	frequent
2021-02-08	2	frequent
2023-07-11	2	frequent
2022-12-19	1	not frequent
2022-11-18	1	not frequent
2021-11-24	1	not frequent
2022-03-30	1	not frequent
2021-12-25	1	not frequent
2023-09-14	1	not frequent
2022-08-09	1	not frequent
2022-11-08	1	not frequent
2022-08-11	1	not frequent
2022-12-09	1	not frequent
2021-07-28	1	not frequent
2022-12-05	1	not frequent
2021-10-27	1	not frequent
2021-09-18	1	not frequent
2021-05-27	1	not frequent
2022-06-24	1	not frequent
2022-09-22	1	not frequent
2022-07-24	1	not frequent
2021-11-22	1	not frequent
2021-05-04	1	not frequent
2022-11-10	1	not frequent
2022-12-15	1	not frequent
2021-09-02	1	not frequent
2023-08-10	1	not frequent
2021-10-26	1	not frequent
2023-06-15	1	not frequent
2023-03-31	1	not frequent
2023-07-02	1	not frequent
2021-03-14	1	not frequent
2023-04-27	1	not frequent
2021-08-02	1	not frequent
2021-01-28	1	not frequent
2023-08-12	1	not frequent
2021-05-02	1	not frequent
2021-12-18	1	not frequent
2022-04-23	1	not frequent
2022-12-01	1	not frequent
2023-04-02	1	not frequent
2021-11-28	1	not frequent
2021-11-23	1	not frequent
2022-03-23	1	not frequent

2022-05-25	1	not frequent
2022-05-26	1	not frequent
2021-05-20	1	not frequent
2023-05-28	1	not frequent
2021-02-28	1	not frequent
2022-10-09	1	not frequent
2022-03-29	1	not frequent
2023-01-14	1	not frequent
2023-05-27	1	not frequent
2023-08-19	1	not frequent
2023-02-24	1	not frequent
2021-07-15	1	not frequent
2023-01-19	1	not frequent
2021-06-29	1	not frequent
2021-09-26	1	not frequent
2023-05-23	1	not frequent
2023-08-08	1	not frequent
2021-11-08	1	not frequent
2021-09-13	1	not frequent
2022-07-15	1	not frequent
2022-06-17	1	not frequent
2022-05-24	1	not frequent
2022-02-12	1	not frequent
2023-03-09	1	not frequent
2022-11-20	1	not frequent
2022-03-16	1	not frequent
2023-08-11	1	not frequent
2021-11-12	1	not frequent
2022-08-20	1	not frequent
2022-10-28	1	not frequent
2023-06-19	1	not frequent
2022-07-27	1	not frequent
2023-07-06	1	not frequent
2023-03-19	1	not frequent
2021-06-01	1	not frequent
2022-12-07	1	not frequent
2022-02-15	1	not frequent
2023-04-05	1	not frequent
2022-09-21	1	not frequent
2023-03-12	1	not frequent
2022-08-18	1	not frequent
2023-02-14	1	not frequent
2022-09-05	1	not frequent
2022-09-14	1	not frequent
2023-08-27	1	not frequent
2021-12-26	1	not frequent
2022-07-02	1	not frequent
2021-09-17	1	not frequent
2022-03-14	1	not frequent
2022-12-16	1	not frequent
2021-08-19	1	not frequent
2021-12-28	1	not frequent
2021-02-05	1	not frequent
2023-08-15	1	not frequent
2023-02-16	1	not frequent

2021-09-07	1	not frequent
2022-05-22	1	not frequent
2022-01-25	1	not frequent
2021-06-18	1	not frequent
2023-06-21	1	not frequent
2022-01-15	1	not frequent

In [93]:
```sql
%%sql

#Market Hotspots: Find locations in the game where the most transactions or trades occur. This could indicate a

SELECT
    k.name AS kingdom_name,
    t.kingdom_id,
    COUNT(*) AS total_transactions
FROM
    transaction AS t
JOIN
    kingdom AS k ON k.id = t.kingdom_id
GROUP BY
    kingdom_name, t.kingdom_id
ORDER BY
    total_transactions DESC;
```
 * mysql://root:***@localhost/project_mysticquest
4 rows affected.

Out[93]:
kingdom_name	kingdom_id	total_transactions
Orynthia	2	54
Valoria	3	48
Elphora	4	47
Cimmeria	1	39

In [94]:
```sql
%%sql

#CUSTOM QUERY

#The SQL query you've provided is designed to detect potentially suspicious behavior by monitoring transactions

SELECT
    player.first_name,
    transaction.timestamp,
    CASE
        WHEN (transaction.amount) > 800 THEN 'High Increase' #transactions higher than 800 is a high increase
        ELSE 'Normal'
    END AS balance_change_status
FROM
    transaction
JOIN player ON transaction.receiver_id = player.id;
```
 * mysql://root:***@localhost/project_mysticquest
32 rows affected.

first_name	timestamp	balance_change_status
Naelor	2021-11-09 05:14:36	Normal
Elidora	2021-04-24 22:09:14	Normal
Illinor	2021-01-02 23:54:38	High Increase
Veylan	2021-04-27 03:16:06	Normal
Aeriana	2023-07-29 05:46:07	Normal
Thorgal	2023-03-01 13:42:11	Normal
Thundara	2022-10-01 17:00:23	Normal
Seraphix	2021-01-20 11:22:10	High Increase
Thera	2022-05-16 09:30:58	Normal
Elira	2021-04-19 20:59:57	Normal
Runorin	2022-06-01 04:14:03	Normal
Lyrielle	2023-06-21 10:37:27	High Increase
Oromis	2022-09-06 19:56:51	Normal
Zephyrix	2021-05-09 21:17:14	Normal
Goromir	2022-01-01 10:25:19	Normal
Thera	2021-04-12 13:07:51	Normal
Morwyn	2021-08-11 19:23:07	Normal
Thera	2021-06-29 17:03:44	Normal
Elanor	2022-11-09 06:58:02	Normal
Belthorn	2022-02-16 01:29:22	Normal
Belthorn	2022-01-01 22:48:26	Normal
Belthorn	2021-12-22 17:34:48	Normal
Thera	2023-01-17 06:36:42	Normal
Thera	2023-03-20 06:01:41	Normal
Serafelle	2022-06-15 23:52:13	High Increase
Quorlinn	2022-11-10 20:10:56	Normal
Runorin	2021-07-09 14:38:00	Normal
Gilean	2021-09-18 21:48:25	Normal
Isolde	2021-05-09 06:34:04	High Increase
Grundor	2021-11-25 16:10:49	High Increase
Elira	2021-07-02 05:47:17	Normal
Thera	2023-08-04 20:50:58	Normal

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