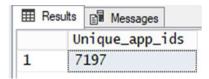
--Check the number of unique apps in both tables of Applestore

SELECT COUNT(distinct id) AS Unique_app_ids from AppleStore



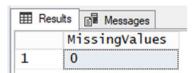
SELECT COUNT(distinct id) AS Unique_app_ids from description

⊞ R	esults		Messa	ges	
	U	niq	ue_ap	p_i	ds
1	7	197			

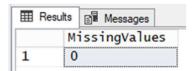
--Check for any missing values in key fields

SELECT COUNT(*) AS Missing Values from AppleStore

where track_name is null or user_rating_ver is null or prime_genre is null

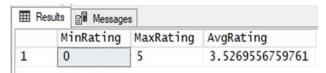


SELECT COUNT(*) AS MissingValues from description where app_desc is null



--Get an Overview of the app's ratings

SELECT Min(user_rating) AS MinRating, Max(user_rating) AS MaxRating, Avg(user_rating) AS AvgRating from AppleStore



--Determine whether paid apps have better rating than free apps

SELECT CASE WHEN price > 0 THEN 'paid' ELSE 'free' END AS App_Type, AVG(user_rating) AS Avg_Rating FROM AppleStore

GROUP BY CASE WHEN price > 0 THEN 'paid' ELSE 'free' END

Results		ssages	
	App_Typ	e A	/g_Rating
1	paid	3	.72094874243871
2	free	3	. 3767258382643

--Find out the number of apps per genre

SELECT prime_genre,COUNT(*) AS NumApps from AppleStore group SELECT (price / 2) * 2 AS PriceBinStart, ((price / 2) * 2) + 2 AS by prime_genre order by NumApps DESC

Results Messages prime_genre NumApps 1 Games 3862 2 Entertainment 535 3 Education 453 Photo & Video 4 349 5 Utilities 248 6 Health & Fitness 180 7 Productivity 178 8 Social Networ... 167 9 Lifestyle 144 10 Music 138 11 Shopping 122 12 Sports 114 13 Book 112 14 104 Finance 15 Travel 81 16 News 75 17 Weather 72 Reference 18 64 19 Food & Drink 63 20 Business 57 21 Navigation 46 22 Medical 23 23 Catalogs 10

--Get the distribution of app prices

PriceBinEnd, COUNT(*) AS NumApps FROM AppleStore

GROUP BY (price / 2) * 2 ORDER BY (price / 2) * 2

Ⅲ Re	sults Messages		
	PriceBinStart	PriceBinEnd	NumApps
1	0	2	4056
2	0.99000000953674	3 2.99000000953674	728
3	1.99000000953674	3.99000000953674	621
4	2.99000000953674	4.99000000953674	683
5	3.99000000953674	5.99000000953674	277
6	4.98999977111816	6.98999977111816	394
7	5.98999977111816	7.98999977111816	52
8	6.98999977111816	8.98999977111816	166
9	7.98999977111816	9.98999977111816	33
10	8.98999977111816	10.9899997711182	9
11	9.98999977111816	11.9899997711182	81
12	11.9899997711182	13.9899997711182	6
13	12.9899997711182	14.9899997711182	5
14	13.9899997711182	15.9899997711182	6
15	14.9899997711182	16.9899997711182	21
16	15.9899997711182	17.9899997711182	4
17	16.9899997711182	18.9899997711182	2
18	17.9899997711182	19.9899997711182	3
19	18.9899997711182	20.9899997711182	1
20	19.9899997711182	21.9899997711182	13
21	20.9899997711182	22.9899997711182	2
22	21.9899997711182	23.9899997711182	1
23	22.9899997711182	24.9899997711182	2
24	23.9899997711182	25.9899997711182	2
25	24.9899997711182	26.9899997711182	8
26	27.9899997711182	29.9899997711182	2
27	29.9899997711182	31.9899997711182	6
28	34.9900016784668	36.9900016784668	1
29	39.9900016784668	41.9900016784668	2
30	47.9900016784668	49.9900016784668	1
31	49.9900016784668	51.9900016784668	2
32	59.9900016784668	61.9900016784668	3
33	74.9899978637695	76.9899978637695	1
34	99.9899978637695	101.98999786377	1
35	249.990005493164	251.990005493164	1
36	299.989990234375	301.989990234375	1

--Check if app with more language support have higher ratings

SELECT CASE

WHEN lang_num < 10 then '<10 languages'

WHEN lang_num between 10 and 30 then '10-30 languages' ELSE '>30 languages' END as languages_bucket, AVG(user_rating) as Avg_Rating

FROM AppleStore group by CASE

WHEN lang_num < 10 then '<10 languages'

WHEN lang_num between 10 and 30 then '10-30 languages' ELSE '>30 languages' END

order by Avg_Rating DESC

⊞ Re	esults Messages	
	languages_bucket	Avg_Rating
1	10-30 languages	4.13051209103841
2	>30 languages	3.777777777778
3	<10 languages	3.36832740213523

-- Check genres with low ratings

 $\label{eq:select_top} select top (10) prime_genre, AVG (user_rating) as Avg_Rating from AppleStore group by prime_genre order by Avg_Rating ASC$

	prime_genre	Avg_Rating
1	Catalogs	2.1
2	Finance	2.43269230769231
3	Book	2.47767857142857
4	Navigation	2.68478260869565
5	Lifestyle	2.805555555556
6	News	2.98
7	Sports	2.98245614035088
8	Social Networking	2.98502994011976
9	Food & Drink	3.18253968253968
10	Entertainment	3.24672897196262

-- Check if there is correlation between the length of description and the user rating

SELECT case

when len(d.app_desc) < 500 then 'Short'

when len(d.app_desc) between 500 and 1000 then 'Medium' Else 'Long'

End as descripion_length_bucket,

AVG(user_rating) as Avg_Rating

FROM AppleStore as a

join description as d on a.id = d.id

group by case

when len(d.app_desc) < 500 then 'Short'

when len(d.app_desc) between 500 and 1000 then 'Medium' Else 'Long' End

order by Avg_Rating DESC

⊞ Re	esults Messages	
	descripion_length_bucket	Avg_Rating
1	Long	3.85594694498804
2	Medium	3.2328094302554
3	Short	2.53361344537815

-- Check top-rated app for each genre

 $select\ prime_genre,\ track_name,\ user_rating\ from(\ select\ prime_genre,\ track_name,\ user_rating\ , rating_count_tot\ DESC)\ AS\ rank\\$

from AppleStore

as a

where a.rank = 1

	prime_genre	track_name	user_rating
1	Book	Color Therapy Adult Coloring Book for Adults	5
2	Business	TurboScan™ Pro - document & receipt scanner: sc	5
3	Catalogs	CPlus for Craigslist app - mobile classifieds	5
4	Education	Elevate - Brain Training and Games	5
5	Entertainment	Bruh-Button	5
6	Finance	Credit Karma: Free Credit Scores, Reports & Alerts	5
7	Food & Drink	Domino's Pizza USA	5
8	Games	Head Soccer	5
9	Health & Fitness	Yoga Studio	5
10	Lifestyle	ipsy - Makeup, subscription and beauty tips	5
11	Medical	Blink Health	5
12	Music	Tenuto	5
13	Navigation	parkOmator - for Apple Watch meter expiration t	5
14	News	The Guardian	5
15	Photo & Video	Pic Collage - Picture Editor & Photo Collage Maker	5
16	Productivity	VPN Proxy Master - Unlimited WiFi security VPN	5
17	Reference	Sky Guide: View Stars Night or Day	5
18	Shopping	Zappos: shop shoes & clothes, fast free shipping	5
19	Social Networ	We Heart It - Fashion, wallpapers, quotes, tattoos	5
20	Sports	J23 - Jordan Release Dates and History	5
21	Travel	Urlaubspiraten	5
22	Utilities	Flashlight ©	5
23	Weather	NOAA Hi-Def Radar Pro - Storm Warnings, Hurric	5

Insights

- Paid apps have better ratings
- Apps supporting between 10 and 30 languages have better ratings
- · Finance and books apps have low ratings
- · Apps with a longer description have better ratings
- A new app should aim for an average rating above 3.5
- Games and entertainment have higher competition