```
1 use [Unicorn Company];
 3
 4 -- ===========
 5 -- EXPLORATORY DATA ANALYSIS
 6 -- =========
 7
 8 --General overview of the Unicorn Companies
9 SELECT
10
      COUNT(*) AS total_companies,
       MIN(Valuation2) AS min_valuation,
11
       MAX(Valuation2) AS max valuation,
       AVG(Valuation2) AS avg valuation
14 FROM Unicorn_C;
15
16 -- How many Unicorn Companies are valued above average (most highly-valued
     unicorns)
17 SELECT COUNT (*)
18 FROM Unicorn C
19 WHERE Valuation2 > (SELECT AVG(Valuation2) FROM Unicorn_C);
21 -- Number of Unicorn Company with each passing Year
22 SELECT
       [Year Founded],
       COUNT(*) AS total_companies
24
25 FROM Unicorn C
26 GROUP BY [Year Founded]
27 ORDER BY [Year Founded];
28
29
31 -- 1. In which countries or cities should we consider expanding operations or ▶
     investments
32 -- based on unicorn concentration?
35 -- Top 10 Countries by Number of Unicorns
36 SELECT Country, COUNT(*) AS unicorn_count
37 FROM Unicorn C
38 GROUP BY Country
39 ORDER BY unicorn count DESC
40;
41
42 -- Top 10 Cities by Number of Unicorns
43 SELECT City, Country, COUNT(*) AS unicorn count
44 FROM Unicorn C
45 GROUP BY City, Country
46 ORDER BY unicorn_count DESC
47 ;
48
49 -- Percentage of unicorn in TOTAL by City and Country
50 SELECT TOP 10
51
       City,
52
       Country,
       COUNT(*) AS unicorn_count,
53
       ROUND(CAST(COUNT(*) AS FLOAT) /
```

```
\dotstfolio projects\Unicorn+Companies\Unicorn companies.sql
55
             (SELECT COUNT(*) FROM Unicorn C) * 100, 2) AS percentage of total
 56 FROM Unicorn C
 57 GROUP BY City, Country
 58 ORDER BY unicorn_count DESC;
 59
 60 -- Percentage of unicorn in each country by City
 61 WITH CountryTotals AS (
        SELECT Country, COUNT(*) AS total_in_country
 62
 63
        FROM Unicorn C
 64
       GROUP BY Country
 65 )
 66 SELECT TOP 10
       uc.City,
 68
        uc.Country,
 69
        COUNT(*) AS unicorn_count,
        ROUND(CAST(COUNT(*) AS FLOAT) / ct.total_in_country * 100, 2) AS
 70
          percentage_of_country_total
 71 FROM Unicorn_C uc
 72 JOIN CountryTotals ct ON uc.Country = ct.Country
 73 GROUP BY uc.City, uc.Country, ct.total_in_country
 74 ORDER BY unicorn count DESC;
 75
 76
 78 -- 2. Which industries are leading in unicorn creation, and are these trends
 79 -- consistent across continents?
 82 -- Top Industries Globally
 83 -- Industries have the most or highest-valued unicorns
 84 SELECT
 85
       Industry,
 86
        COUNT(*) AS total companies,
 87
       SUM(Valuation2) AS total valuation
 88 FROM Unicorn C
 89 GROUP BY Industry
 90 ORDER BY total_valuation DESC;
 91
 92 -- Top Industries by Continent
 93 SELECT Continent, Industry, COUNT(*) AS industry_count
 94 FROM Unicorn C
 95 GROUP BY Continent, Industry
 96 ORDER BY industry count DESC;
 97
 98 -- By Country
 99 SELECT Country, Industry, COUNT(*) AS industry_count
100 FROM Unicorn_C
101 GROUP BY Country, Industry
102 ORDER BY industry_count DESC;
103
104
106 -- 3. Which investors consistently fund high-valuation or fast-growing
     unicorns?
107 -- Which countries are the top investors from?
```

```
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```

```
3
```

```
109
110 -- TOP 10 INVESTORS
111 SELECT TOP 10 investor, COUNT(*) AS num_investments
112 FROM (
113
        SELECT [Investor 1] AS investor FROM Unicorn C WHERE [Investor 1] IS NOT
          NULL
114
        UNION ALL
115
        SELECT [Investor 2] FROM Unicorn_C WHERE [Investor 2] IS NOT NULL
116
117
        SELECT [Investor 3] FROM Unicorn_C WHERE [Investor 3] IS NOT NULL
118
        UNION ALL
        SELECT [Investor 4] FROM Unicorn C WHERE [Investor 4] IS NOT NULL
119
120 ) AS all investors
121 GROUP BY investor
122 ORDER BY num investments DESC
123 ;
124
     -- there was an oversight with the cleaning done in excel thats why some
       companies with the same name is appearing twice.
125
     -- apparently the investor columns have a space character before the start of ₹
        each investor name. Starting from Investor 2 column
126
     -- We need to do some TRIMMING and UPDATING
127
128 UPDATE Unicorn C
129 SET
130
        [Investor 1] = TRIM([Investor 1]),
131
        [Investor 2] = TRIM([Investor 2]),
132
        [Investor 3] = TRIM([Investor 3]),
133
        [Investor 4] = TRIM([Investor 4]);
134
135 -- Cities and Countries with Top investors
136 WITH invest AS (
137
        SELECT [Investor 1] AS investor, City, Country FROM Unicorn_C WHERE
          [Investor 1] IS NOT NULL
138
        UNION ALL
        SELECT [Investor 2], City, Country FROM Unicorn_C WHERE [Investor 2] IS
139
          NOT NULL
140
        UNION ALL
141
        SELECT [Investor 3], City, Country FROM Unicorn_C WHERE [Investor 3] IS
          NOT NULL
        UNION ALL
142
        SELECT [Investor 4], City, Country FROM Unicorn C WHERE [Investor 4] IS
143
144 )
145
146 SELECT TOP 10
147
        investor,
148
        City,
149
        Country,
150
        COUNT(*) AS num_investments
151 FROM invest
152 GROUP BY investor, City, Country
153 ORDER BY num investments DESC;
154
155
157 -- 4. Are companies reaching unicorn status faster now compared to the past?
```

```
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```

```
158 -- Which industries or geographies show faster timelines?
160
161 -- Time to Unicorn per Company
162 SELECT
163
        Company, Industry,
        YEAR([Date Joined]) - [Year Founded] AS years_to_unicorn
164
165 FROM Unicorn C
166 ORDER BY years_to_unicorn ASC;
167
168 -- Average Time to Unicorn by Industry
169 SELECT
170
        Industry,
171
        ROUND(AVG((YEAR ([Date Joined]) - [Year Founded])), 0) AS
          Avg_Years_To_Unicorn
172 FROM Unicorn C
173 WHERE [Year Founded] IS NOT NULL AND [Date Joined] IS NOT NULL
174 GROUP BY Industry
175 ORDER BY Avg_Years_To_Unicorn;
176
177 -- Yearly Average Time to Unicorn
178 SELECT
        YEAR ([Date Joined]) AS Year joined,
179
180
        ROUND(AVG((YEAR ([Date Joined]) - [Year Founded])), 0) AS
         Avg_Years_To_Unicorn
181 FROM Unicorn C
182 WHERE [Year Founded] IS NOT NULL AND [Date Joined] IS NOT NULL
183 GROUP BY YEAR ([Date Joined])
184 ORDER BY Year_joined;
185
186
187 --Alternatively, how efficiently a company has turned investor funding into
      perceived value.
188 --how many dollars in valuation the company achieved for every $1 of investor ➤
      funding
189 SELECT
190
        Company,
191
       Valuation2,
192
        Funding2,
193
       ROUND((Valuation2 / Funding2),1) AS valuation_to_funding_ratio
194 FROM Unicorn C
195 WHERE Funding2 > 0
196  ORDER BY valuation_to_funding_ratio DESC;
197
198
200 -- 5. Which cities have emerged as innovation hubs for unicorn creation?
201 -- How has this changed over time?
203
204 -- Number of unicorns per year joined:
205 SELECT
        YEAR([Date Joined]) AS year joined,
206
207
       COUNT(*) AS new_unicorns
208 FROM Unicorn C
209 GROUP BY YEAR([Date Joined])
```

```
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210 ORDER BY year_joined;
211
212 -- Trend of Unicorns FOUNDED per year across all industries
213 SELECT Industry, [Year Founded], COUNT(*) AS industry_count
214 FROM Unicorn C
215 GROUP BY Industry, [Year Founded]
216 ORDER BY [Year Founded] ASC, Industry;
217
218 -- Unicorn Count by Country Over Time
219 SELECT
220
        Country,
221
        YEAR([Date Joined]) AS Year Joined,
        COUNT(*) AS unicorns in year
223 FROM Unicorn C
224 WHERE Country IS NOT NULL AND [Date Joined] IS NOT NULL
225 GROUP BY Country, YEAR([Date Joined])
226 ORDER BY Year_Joined;
227
228
229 -- Number of unicorns FOUNDED per year across industries (i.e Fintech Edtech, ➤
      Travel, Other, Supply chain, & delivery, Auto & transportation etc)
230 SELECT Industry, [Year Founded], COUNT(*) AS industry_count
231 FROM Unicorn C
232 WHERE Industry = 'Fintech'
233 GROUP BY Industry, [Year Founded]
234 ORDER BY [Year Founded];
235
236
237 -- Number of unicorns per year across industries
238 SELECT Industry, YEAR([Date Joined]) Year_joined, COUNT(*) AS industry_count
239 FROM Unicorn C
240 WHERE Industry = 'Fintech'
241 GROUP BY Industry, YEAR([Date Joined])
242 ORDER BY YEAR([Date Joined]);
243
244
245
246 -- 2021 is a very PIVOTAL YEAR as it records the most Unicorn per Year (520)
247 -- Let's investigate this!!!
249 -- Unicorn Count by industry in 2021
250 SELECT
251
        Industry,
        COUNT(*) AS unicorns_in_year_2021
252
253 FROM Unicorn C
254 WHERE Industry IS NOT NULL AND [Date Joined] IS NOT NULL AND YEAR([Date
      Joined])=2021
255 GROUP BY Industry, YEAR([Date Joined])
256 ORDER BY unicorns_in_year_2021 DESC;
257
258 -- Unicorn Companies in 2021
259 SELECT
260
        Company
261 FROM Unicorn_C
262 WHERE Company IS NOT NULL AND [Date Joined] IS NOT NULL AND YEAR([Date
```

Joined])=2021

```
263
264 -- list of all companies under the Fintech Industry
265 SELECT
        STUFF((
266
            SELECT DISTINCT ', ' + Company
267
268
            FROM Unicorn C
            WHERE Company IS NOT NULL AND [Date Joined] IS NOT NULL AND YEAR([Date →
269
               Joined])=2021 AND Industry = 'Fintech'
            FOR XML PATH(''), TYPE).value('.', 'NVARCHAR(MAX)'), 1, 2, ''
270
271
        ) AS Company_List;
272
273 -- LIST OF UNICORN COMPANIES IN 2021 UNDER THE FINTECH INDUSTRY (138)
275 -- Acko General Insurance, Addepar, AgentSync, Ajaib, Alan, Alchemy, Alloy,
      Amber Group, Amount, Anchorage Digital, Ascend Money,
276 -- At-Bay, Betterment, BharatPe, BitPanda, Bitso, Blockchain.com, BlockDaemon, ➤
       BlockFi, Blockstream, Bolt, bolttech, Bought By Many,
277 -- Bunq, candy.com, Carson Group, Cedar, Celsius Network, CFGI, ChargeBee
      Technologies, Chipper Cash, Clara, Clearco, Clearcover, Clip,
278 -- CloudWalk, CoinDCX, CoinList, CoinSwitch Kuber, ConsenSys, CRED, Current,
      DailyPay, Dapper Labs, Deel, Digit Insurance,
279 -- Digital Currency Group, Divvy Homes, DriveWealth, Dunamu, Earnix, Ethos,
      Extend, FalconX, Fireblocks, FloQast, Flutterwave,
280 -- Forte Labs, Freshbooks, FTX, Fundbox, Gemini, Groww, Guideline, HomeLight,
      Huisuanzhang, Human Interest, Hyperchain, iCapital Network,
281 -- Injective Protocol, Interos, Konfio, Lendable, Lunar, Lydia, M1 Finance,
      Mambu, Marshmallow, Masterworks, Matrixport, Melio, Mercury,
282 -- MobiKwik, MobileCoin, Modern Treasury, MoMo, MoonPay, MX Technologies,
      Mynt, NIUM, Opay, Orchard, Pacaso, Paxos, Pilot.com, Pipe, Pleo,
283 -- PPRO, Public, Ramp, ReCharge, Remote, SaltPay, Scalable Capital, Sidecar
      Health, Signifyd, Slice, SmartAsset, SmartHR, Snapdocs,
284 -- solarisBank, SpotOn, Starling Bank, Stash, Sunbit, Swile, TaxBit, The Bank 🤝
      of London, Thought Machine, Trade Republic, TradingView,
285 -- TrueLayer, Uala, Upstox, Varo Bank, Vise, Wave, WeBull, Worldcoin,
      Wrapbook, Xendit, Xiaobing, Zego, ZenBusiness, ZEPZ, Zeta, Zilch, Zopa
286
287
288 -- Which investors contribute to the spike in unicorn companies in 2021
289 -- Top Investors Behind 2021 Unicorns Spike
290 WITH investor_cte AS (
        SELECT [Investor 1] AS Investor FROM Unicorn C WHERE YEAR([Date Joined]) = →
291
           2021 AND [Investor 1] IS NOT NULL
292
293
        SELECT [Investor 2] FROM Unicorn C WHERE YEAR([Date Joined]) = 2021 AND
          [Investor 2] IS NOT NULL
294
        UNION ALL
295
        SELECT [Investor 3] FROM Unicorn_C WHERE YEAR([Date Joined]) = 2021 AND
          [Investor 3] IS NOT NULL
296
        UNION ALL
297
        SELECT [Investor 4] FROM Unicorn_C WHERE YEAR([Date Joined]) = 2021 AND
          [Investor 4] IS NOT NULL
298
299
300 SELECT TOP 10
301
        Investor,
302
        COUNT(*) AS Unicorn Count 2021
```

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```
-
```

```
303 FROM investor_cte
304 GROUP BY Investor
305 ORDER BY Unicorn_Count_2021 DESC;
306
307
308 -- List of Investors and Their Funded Unicorn Companies
309 WITH investor_company_cte AS (
310
        SELECT [Investor 1] AS Investor, Company FROM Unicorn_C WHERE [Investor 1] →
           IS NOT NULL
311
        UNION ALL
312
        SELECT [Investor 2], Company FROM Unicorn C WHERE [Investor 2] IS NOT NULL
313
        UNION ALL
        SELECT [Investor 3], Company FROM Unicorn C WHERE [Investor 3] IS NOT NULL
314
315
        UNION ALL
        SELECT [Investor 4], Company FROM Unicorn_C WHERE [Investor 4] IS NOT NULL
316
317 )
318
319 SELECT
320
        Investor,
321
        STUFF(( SELECT ', ' + ic2.Company
322
                FROM investor company cte ic2
323
                WHERE ic2.Investor = ic1.Investor
                FOR XML PATH(''), TYPE
324
325
        ).value('.', 'NVARCHAR(MAX)'), 1, 2, '') AS Funded_Companies
326 FROM investor_company_cte ic1
327 GROUP BY Investor
328 ORDER BY Investor;
329
330
331 -- List of Unique Investors in FINTECH Companies
332 WITH fintech investors AS (
333
        SELECT [Investor 1] AS Investor FROM Unicorn C WHERE Industry = 'Fintech' →
          AND [Investor 1] IS NOT NULL
334
        UNION
        SELECT [Investor 2] FROM Unicorn C WHERE Industry = 'Fintech' AND
335
          [Investor 2] IS NOT NULL
        UNION
336
337
        SELECT [Investor 3] FROM Unicorn C WHERE Industry = 'Fintech' AND
          [Investor 3] IS NOT NULL
338
        UNION
        SELECT [Investor 4] FROM Unicorn C WHERE Industry = 'Fintech' AND
339
          [Investor 4] IS NOT NULL
340 )
341
342 SELECT
        STUFF((
343
            SELECT DISTINCT ', ' + Investor
344
345
            FROM fintech_investors
346
            FOR XML PATH(''), TYPE
347
        ).value('.', 'NVARCHAR(MAX)'), 1, 2, '') AS Investors_List
348
350 -- One major factor that contributed to the significant number of Unicorn in
      2021 is the Global Pandemic (COVID-19) which restricted movement and
      instigated a lockdown
351 -- COVID-19 accelerated digital adoption in 2021, boosting Fintech and
```

```
Internet Software & Services.
352 -- Lockdowns increased demand for digital payments, online banking, and remote →
      tools,
353 -- leading to a surge in unicorns in these sectors due to rapid growth and
      investor interest.
354
355
-- 6. Are Newer Companies More Likely to Become Unicorns?
359
360 --There is a an unusual skyrocketing (significant peak) in 2021, after which
     there is significant drop in 2022.
361 -- We can attribute this to digital transformation in the wake of the COVID-19 →
      pandemic.
362 -- It's most likely to continue in the same steady trend from before the 2021
363 SELECT YEAR([Date Joined]) AS Year_Joined, COUNT(*) AS unicorn_count
364 FROM Unicorn_C
365 WHERE [Date Joined] IS NOT NULL
366 GROUP BY YEAR([Date Joined])
367 ORDER BY Year Joined;
368
369
371 -- 7. Yearly Growth pattern before the year 2021
373 -- The significant emergence of Unicorn Companies in 2021 can be traced down
     to the COVID-19 pandemic.
374 -- Events like the COVID-19 pandemic are not regular occurences, hence 2021
     was excluded from this analysis helps avoid skewed data,
375 -- which could introduce bias and misrepresent trends in industry investment.
376 -- Focusing on 2012-2020 ensures consistency and reliability of insights.
377
378
379 -- Yearly Valuation Growth by Industry (Before 2021)
380 WITH YearlyIndustryValuation AS (
       SELECT
381
382
           Industry,
383
           YEAR([Date Joined]) AS Year_Joined,
384
           SUM(Valuation2) AS Total_Valuation
385
       FROM Unicorn C
       WHERE
386
           [Date Joined] IS NOT NULL
387
           AND Valuation2 IS NOT NULL
388
389
           AND YEAR([Date Joined]) < 2021
           AND Industry IS NOT NULL
390
391
       GROUP BY Industry, YEAR([Date Joined])
392),
393
394 GrowthCalculation AS (
395
       SELECT
396
           Industry,
           Year Joined,
397
398
           Total Valuation,
           LAG(Total Valuation) OVER (PARTITION BY Industry ORDER BY Year Joined) >
399
              AS Prev Valuation
```

```
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```

```
400
         FROM YearlyIndustryValuation
401 )
402
403 SELECT
404
        Industry,
405
         Year_Joined,
406
         Total_Valuation,
407
         Prev_Valuation,
408
         ROUND(
409
             CASE
                 WHEN Prev Valuation IS NULL THEN NULL
410
411
                 ELSE ((Total Valuation - Prev Valuation) / Prev Valuation) * 100
412
             END, 2
413
         ) AS YoY_Growth_Percentage
414 FROM GrowthCalculation
415 ORDER BY Industry, Year_Joined;
416
417
418 -- Industry Valuation Share Over Time (Pre-2021)
419 WITH IndustryYTD AS (
420
         SELECT
421
             Industry,
422
             YEAR([Date Joined]) AS Year Joined,
423
             SUM(Valuation2) AS Industry_Valuation
        FROM Unicorn_C
424
425
        WHERE
             [Date Joined] IS NOT NULL
426
             AND Valuation2 IS NOT NULL
427
428
             AND YEAR([Date Joined]) <= 2020
         GROUP BY Industry, YEAR([Date Joined])
429
430 ),
431 TotalYTD AS (
432
        SELECT
433
             Year Joined,
             SUM(Industry_Valuation) AS Total_Valuation
434
         FROM IndustryYTD
435
         GROUP BY Year_Joined
436
437 )
438
439 SELECT
440
         i.Industry,
441
         i.Year Joined,
         i.Industry_Valuation,
442
443
         t. Total Valuation,
444
         ROUND(100.0 * i.Industry Valuation / t.Total Valuation, 2) AS
           Percentage_Share
445 FROM IndustryYTD i
446 JOIN TotalYTD t
         ON i.Year Joined = t.Year Joined
448 ORDER BY i.Year_Joined, Percentage_Share DESC;
449
450
451 -- Yearly Valuation Growth by Investor (Before 2021)
452 WITH AllInvestors AS (
453
         SELECT [Investor 1] AS Investor, Valuation2, [Date Joined]
```

454

FROM Unicorn C

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```

```
10
```

```
455
         WHERE [Investor 1] IS NOT NULL AND Valuation2 IS NOT NULL AND [Date
           Joined] IS NOT NULL AND YEAR([Date Joined]) < 2021</pre>
456
         UNION ALL
457
         SELECT [Investor 2], Valuation2, [Date Joined]
458
         FROM Unicorn C
         WHERE [Investor 2] IS NOT NULL AND Valuation2 IS NOT NULL AND [Date
459
           Joined] IS NOT NULL AND YEAR([Date Joined]) < 2021</pre>
460
         UNION ALL
461
         SELECT [Investor 3], Valuation2, [Date Joined]
462
         FROM Unicorn_C
         WHERE [Investor 3] IS NOT NULL AND Valuation2 IS NOT NULL AND [Date
463
           Joined] IS NOT NULL AND YEAR([Date Joined]) < 2021</pre>
464
         UNION ALL
465
         SELECT [Investor 4], Valuation2, [Date Joined]
466
         FROM Unicorn C
467
         WHERE [Investor 4] IS NOT NULL AND Valuation2 IS NOT NULL AND [Date
           Joined] IS NOT NULL AND YEAR([Date Joined]) < 2021</pre>
468),
469
470 InvestorValuationByYear AS (
471
         SELECT
472
             Investor,
             YEAR([Date Joined]) AS Year Joined,
473
474
             SUM(Valuation2) AS Total Valuation
475
         FROM AllInvestors
476
         GROUP BY Investor, YEAR([Date Joined])
477 ),
478
479
    InvestorGrowth AS (
480
         SELECT
             Investor,
481
482
             Year_Joined,
483
             Total Valuation,
484
             LAG(Total Valuation) OVER (PARTITION BY Investor ORDER BY Year Joined) →
                AS Prev Valuation
485
         FROM InvestorValuationByYear
486 )
487
488 SELECT
489
         Investor,
490
         Year Joined,
         Total Valuation,
491
492
         Prev Valuation,
493
         ROUND(
494
             CASE
                 WHEN Prev Valuation IS NULL THEN NULL
495
496
                 ELSE ((Total_Valuation - Prev_Valuation) / Prev_Valuation) * 100
497
             END, 2
498
         ) AS YoY_Growth_Percentage
499 FROM InvestorGrowth
500 ORDER BY Investor, Year_Joined;
501
502 -- Yearly Unicorn Count by Industry (Excluding 2021)
503 SELECT
504
         Industry,
505
         YEAR([Date Joined]) AS Year Joined,
```

529

```
506
        COUNT(*) AS Industry Unicorns
507 FROM Unicorn C
508 WHERE
509
        [Date Joined] IS NOT NULL
510
       AND YEAR([Date Joined]) < 2021
511 GROUP BY Industry, YEAR([Date Joined])
512 ORDER BY Industry, Year_Joined;
513
514
515
516
518 -- Business Insight
520 -- The total of Unicorn Companies as registered by this dataset is 1074, of
     which 240 companies have valuations above the average.
521 -- there have been a gradual increase in emergence Unicorn Companies over the 🤝
     years, with the peak at 2021 (520).
522 --this significant increase from a gradual trend can be attributed to the
     Global Pandemic (COVID-19), w hich acceerated the digital transformation
523 -- The United State remains the Country with the highest number of Unicorn
                                                                            P
     Companies (562), leading the preceeding country more that 5 margins.
524 -- San Francisco tops the list at 148, habouring 26% of the United State
     Unicorn Companies and 14% world wide, and clocking a wooping 303 Unicorn
      Companies in 2021
525 -- This is followed closely by the New York at 103.
526
527
528
```