

▶ Run □ Cancel ⚙ Disconnect ⚙ Change

Database: HR_Analysis_DataBase ▾

✖ Esti

```
152 -- First Category
153 -- Employee Demographics & Salary Analysis
154 -- 1.1 Calculate and display the total number of employees
155 SELECT COUNT(DISTINCT EmployeeID) AS TotalEmployees
156 FROM Employee;
157
158 -- 1.2 Count unique employees by gender
159 SELECT
160     Gender,
161     COUNT(DISTINCT EmployeeID) AS UniqueEmployeeCount
162 FROM Employee
163 GROUP BY Gender;
164
```

Results Messages

	TotalEmployees
1	1470

	Gender	UniqueEmployeeCount
1	Non-Binary	124
2	Prefer Not To Say	20
3	Male	651
4	Female	675

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```
165  -- 1.3 Count unique employees by department
166  SELECT
167      Department,
168      COUNT(DISTINCT EmployeeID) AS UniqueEmployeeCount
169  FROM Employee
170  GROUP BY Department;
171
```

Results Messages

	Department	UniqueEmployeeCount
1	Sales	446
2	Human Resources	63
3	Technology	961

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```
172  -- 1.4 Count unique employees by gender within each department
173  SELECT
174      Department,
175      Gender,
176      COUNT(DISTINCT EmployeeID) AS UniqueEmployeeCount
177  FROM Employee
178  GROUP BY Department, Gender
179  ORDER BY Department, Gender;
180
```

Results Messages

	Department	Gender	UniqueEmployeeCount
1	Human Resources	Female	33
2	Human Resources	Male	24
3	Human Resources	Non-Binary	5
4	Human Resources	Prefer Not To Say	1
5	Sales	Female	204
6	Sales	Male	204
7	Sales	Non-Binary	35
8	Sales	Prefer Not To Say	3
9	Technology	Female	438
10	Technology	Male	423
11	Technology	Non-Binary	84
12	Technology	Prefer Not To Say	16

```
181  -- 1.5 Count unique employees by education level
182  SELECT
183    el.EducationLevel,
184    COUNT(DISTINCT e.EmployeeID) AS UniqueEmployeeCount
185  FROM Employee e
186  JOIN EducationLevel el ON e.Education = el.EducationLevelID
187  GROUP BY el.EducationLevel
188  ORDER BY el.EducationLevel;
189
190  -- 1.6 Count unique employees by job role
191  SELECT
192    JobRole,
193    COUNT(DISTINCT EmployeeID) AS UniqueEmployeeCount
194  FROM Employee
195  GROUP BY JobRole
196  ORDER BY JobRole;
197
```

Results Messages

	EducationLevel	UniqueEmployeeCount
1	Bachelors	572
2	Doctorate	48
3	High School	282
4	Masters	398
5	No Formal Qualifications	170

	JobRole	UniqueEmployeeCount
1	Analytics Manager	52
2	Data Scientist	261
3	Engineering Manager	75
4	HR Business Partner	7
5	HR Executive	28
6	HR Manager	4
7	Machine Learning Engineer	146
8	Manager	37
9	Recruiter	24
10	Sales Executive	327
11	Sales Representative	83
12	Senior Software Engineer	132
13	Software Engineer	294

```

198 -- 2. How does the average salary vary by education level?
199 SELECT el.EducationLevel,
200 | AVG(CAST(e.Salary AS DECIMAL(18,2))) AS AverageSalary
201 FROM Employee e
202 JOIN EducationLevel el ON e.Education = el.EducationLevelID
203 GROUP BY el.EducationLevel;
204
205 -- 3. Is there a gender pay gap across different job roles and departments?
206 -- 3. (A) Count the unique number of employees per JobRole
207 SELECT JobRole, COUNT(DISTINCT EmployeeID) AS UniqueEmployeeCount
208 FROM Employee
209 GROUP BY JobRole;
210
211 -- 3. (B) Calculate the average salary based on unique employees per JobRole
212 SELECT e.JobRole,
213 | | CAST(AVG(CAST(e.Salary AS DECIMAL(18, 6))) AS DECIMAL(18, 6)) AS AverageSalary -- Ensure Salary is treated as decimal
214 FROM (SELECT DISTINCT EmployeeID, JobRole, Salary FROM Employee) e
215 GROUP BY e.JobRole;
216

```

Results Messages

	EducationLevel	AverageSalary
1	Bachelors	115405.430069
2	Doctorate	154268.791666
3	High School	105180.535460
4	Masters	117641.057788
5	No Formal Qualifications	94983.482352

	JobRole	UniqueEmployeeCount
1	HR Business Partner	7
2	Machine Learning Engineer	146
3	Recruiter	24
4	Sales Representative	83
5	HR Executive	28
6	Manager	37
7	Analytics Manager	52
8	Sales Executive	327
9	Data Scientist	261
10	Engineering Manager	75
11	Senior Software Engineer	132
12	Software Engineer	294
13	HR Manager	4

	JobRole	AverageSalary
1	HR Business Partner	314002.428571
2	Machine Learning Engineer	130164.616438
3	Recruiter	37647.500000
4	Sales Representative	40656.421686
5	HR Executive	94362.321428
6	Manager	317531.054054
7	Analytics Manager	346484.230769
8	Sales Executive	117195.538226
9	Data Scientist	56079.494252
10	Engineering Manager	286258.506666
11	Senior Software Engineer	126161.295454
12	Software Engineer	51967.051020
13	HR Manager	449330.750000

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```

217 -- 4. What is the salary distribution based on years of experience?
218 -- Calculate the promotion rate by JobRole, similar to the Python code
219 SELECT e.JobRole,
220     COUNT(DISTINCT CASE WHEN e.YearsSinceLastPromotion = 0 THEN e.EmployeeID END) AS PromotedEmployeeCount,
221     COUNT(DISTINCT e.EmployeeID) AS TotalEmployeeCount,
222     (COUNT(DISTINCT CASE WHEN e.YearsSinceLastPromotion = 0 THEN e.EmployeeID END) * 100.0 /
223      COUNT(DISTINCT e.EmployeeID)) AS PromotionRate
224 FROM Employee e
225 GROUP BY e.JobRole
226 ORDER BY PromotionRate DESC;
227
228 -- 5 Calculate the average salary by department for unique employees?
229 SELECT e.Department,
230     CAST(AVG(CAST(e.Salary AS DECIMAL(18, 6))) AS DECIMAL(18, 6)) AS AverageSalary
231 FROM Employee e
232 GROUP BY e.Department
233 ORDER BY AverageSalary DESC;
234

```

Results Messages

	JobRole	PromotedEmployeeCount	TotalEmployeeCount	PromotionRate
1	Recruiter	9	24	37.500000000000
2	Sales Representative	29	83	34.939759036144
3	HR Business Partner	2	7	28.571428571428
4	Machine Learning Engineer	33	146	22.602739726027
5	HR Executive	6	28	21.428571428571
6	Sales Executive	69	327	21.100917431192
7	Software Engineer	62	294	21.088435374149
8	Data Scientist	55	261	21.072796934865
9	Senior Software Engineer	17	132	12.878787878787
10	Engineering Manager	9	75	12.000000000000

	Department	AverageSalary
1	Human Resources	119698.809523
2	Sales	119117.609865
3	Technology	109655.122788

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Database: HR_Analysis_DataBase

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```
235  -- Second Category
236  -- Employee Satisfaction & Engagement
237  -- 6. What is the average satisfaction level across different job roles?
238  SELECT e.JobRole,
239      ROUND(AVG(CAST(p.JobSatisfaction AS DECIMAL(10, 2))), 6) AS AverageSatisfaction,
240      CASE
241          WHEN AVG(p.JobSatisfaction) = 1 THEN 'Very Dissatisfied'
242          WHEN AVG(p.JobSatisfaction) = 2 THEN 'Dissatisfied'
243          WHEN AVG(p.JobSatisfaction) = 3 THEN 'Neutral'
244          WHEN AVG(p.JobSatisfaction) = 4 THEN 'Satisfied'
245          WHEN AVG(p.JobSatisfaction) = 5 THEN 'Very Satisfied'
246          ELSE 'Unknown'
247      END AS SatisfactionLevel
248  FROM Employee e
249  JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
250  JOIN SatisfiedLevel sl ON p.JobSatisfaction = sl.SatisfactionID
251  GROUP BY e.JobRole;
252
```

Results Messages

	JobRole	AverageSatisfaction	SatisfactionLevel
1	HR Business Partner	3.347826	Neutral
2	Machine Learning Engineer	3.453405	Neutral
3	Recruiter	3.469798	Neutral
4	Sales Representative	3.378323	Neutral
5	HR Executive	3.434782	Neutral
6	Manager	3.435714	Neutral
7	Analytics Manager	3.418269	Neutral
8	Sales Executive	3.435897	Neutral
9	Data Scientist	3.457352	Neutral
10	Engineering Manager	3.526490	Neutral
11	Senior Software Engineer	3.356275	Neutral
12	Software Engineer	3.413043	Neutral
13	HR Manager	3.250000	Neutral

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Database: HR_Analysis_DataBase ▾

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```
253 -- 7 Calculate average salary by satisfaction level for unique employees
254 WITH UniqueEmployees AS (
255     SELECT E.EmployeeID,
256         (SELECT TOP 1 PR.JobSatisfaction
257          FROM PerformanceRating PR
258         WHERE PR.EmployeeID = E.EmployeeID
259         ORDER BY PR.EmployeeID) AS JobSatisfaction,
260     (SELECT TOP 1 E2.Salary
261        FROM Employee E2
262       WHERE E2.EmployeeID = E.EmployeeID
263       ORDER BY E2.EmployeeID) AS Salary
264     FROM Employee E
265     GROUP BY E.EmployeeID
266 )
267     SELECT JobSatisfaction, AVG(Salary * 1.0) AS AverageSalary
268     FROM UniqueEmployees
269     WHERE JobSatisfaction IS NOT NULL
270     GROUP BY JobSatisfaction
271     ORDER BY JobSatisfaction;
272
273 -- 8. Do employees with higher education levels report higher satisfaction?
274     SELECT el.EducationLevel,
275         ROUND(AVG(CAST(p.JobSatisfaction AS DECIMAL(10, 2))), 6) AS AverageSatisfaction
276     FROM Employee e
277     JOIN EducationLevel el ON e.Education = el.EducationLevelID
278     JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
279     GROUP BY el.EducationLevel;
```

Results Messages

	JobSatisfaction ▾	AverageSalary ▾
1	1	120500.333333
2	2	116695.341463
3	3	104914.106312
4	4	113217.044444
5	5	120707.823717

	EducationLevel ▾	AverageSatisfaction ▾
1	High School	3.460399
2	Doctorate	3.298578
3	No Formal Qualifications	3.377380
4	Bachelors	3.440015
5	Masters	3.435146

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```

281 -- 9. Which departments have the most satisfied and least satisfied employees?
282 SELECT e.Department,
283     ROUND(AVG(CAST(p.JobSatisfaction AS DECIMAL(10, 2))), 6) AS AverageSatisfaction
284 FROM Employee e
285 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
286 GROUP BY e.Department;
287
288 -- 10. Does job role impact satisfaction level?
289 SELECT e.JobRole,
290     ROUND(AVG(CAST(p.JobSatisfaction AS DECIMAL(10, 2))), 6) AS AverageSatisfaction,
291     CASE
292         WHEN AVG(p.JobSatisfaction) = 1 THEN 'Very Dissatisfied'
293         WHEN AVG(p.JobSatisfaction) = 2 THEN 'Dissatisfied'
294         WHEN AVG(p.JobSatisfaction) = 3 THEN 'Neutral'
295         WHEN AVG(p.JobSatisfaction) = 4 THEN 'Satisfied'
296         WHEN AVG(p.JobSatisfaction) = 5 THEN 'Very Satisfied'
297         ELSE NULL
298     END AS AverageSatisfaction
299 FROM Employee e
300 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
301 JOIN SatisfiedLevel sl ON p.JobSatisfaction = sl.SatisfactionID
302 GROUP BY e.JobRole;
303

```

Results Messages

	Department	AverageSatisfaction
1	Sales	3.422056
2	Human Resources	3.435643
3	Technology	3.434578

	JobRole	AverageSatisfaction	AverageSatisfaction
1	HR Business Partner	3.347826	Neutral
2	Machine Learning Engineer	3.453405	Neutral
3	Recruiter	3.469798	Neutral
4	Sales Representative	3.378323	Neutral
5	HR Executive	3.434782	Neutral
6	Manager	3.435714	Neutral
7	Analytics Manager	3.418269	Neutral
8	Sales Executive	3.435897	Neutral
9	Data Scientist	3.457352	Neutral
10	Engineering Manager	3.526490	Neutral
11	Senior Software Engineer	3.356275	Neutral
12	Software Engineer	3.413043	Neutral
13	HR Manager	3.250000	Neutral

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```
304 -- Third Category
305 -- Attrition & Turnover Analysis
306 -- 11. What is the overall employee attrition rate?
307 SELECT
308     eAttrition,
309     ROUND(COUNT(*) * 100.0 / (SELECT COUNT(*) FROM Employee), 6) AS AttritionRate
310 FROM Employee e
311 GROUP BY eAttrition
312 ORDER BY Attrition DESC;
313
314 -- 12. Which department has the highest employee turnover?
315 SELECT
316     eDepartment,
317     COUNT(*) AS TotalEmployees, -- Count total employees in each department
318     SUM(CASE WHEN eAttrition = 'Yes' THEN 1 ELSE 0 END) AS AttritionEmployees, -- Count employees who left
319     (SUM(CASE WHEN eAttrition = 'Yes' THEN 1 ELSE 0 END) * 100.0) / COUNT(*) AS AttritionRate -- Calculate attrition rate as a percentage
320 FROM Employee e
321 GROUP BY eDepartment
322 ORDER BY AttritionRate DESC; -- Sort departments by highest attrition rate
323
```

Results Messages

	Attrition	AttritionRate
1	Yes	16.122449000000
2	No	83.877551000000

	Department	TotalEmployees	AttritionEmployees	AttritionRate
1	Sales	446	92	20.627802690582
2	Human Resources	63	12	19.047619047619
3	Technology	961	133	13.839750260145

```

324 -- 13. Is there a connection between satisfaction level and attrition?
325 SELECT sl.SatisfactionLevel,
326     COUNT(*) AS TotalEmployees,
327     SUM(CASE WHEN e.Attrition = 'Yes' THEN 1 ELSE 0 END) AS AttritionEmployees,
328     (SUM(CASE WHEN e.Attrition = 'Yes' THEN 1 ELSE 0 END) * 100.0) / COUNT(*) AS AttritionRate
329 FROM PerformanceRating p
330 JOIN SatisfiedLevel sl ON p.EnvironmentSatisfaction = sl.SatisfactionID
331 JOIN Employee e ON p.EmployeeID = e.EmployeeID
332 GROUP BY sl.SatisfactionLevel
333 ORDER BY AttritionRate DESC;
334
335 -- 13. Is there a connection between satisfaction level and attrition?
336 WITH LatestPerformance AS (
337     SELECT
338         EmployeeID,
339         EnvironmentSatisfaction,
340         ROW_NUMBER() OVER (PARTITION BY EmployeeID ORDER BY ReviewDate DESC) AS rn
341     FROM PerformanceRating
342 )
343 SELECT
344     sl.SatisfactionLevel,
345     COUNT(DISTINCT e.EmployeeID) AS TotalEmployees,
346     COUNT(DISTINCT CASE WHEN e.Attrition = 'Yes' THEN e.EmployeeID END) AS AttritionEmployees,
347     (COUNT(DISTINCT CASE WHEN e.Attrition = 'Yes' THEN e.EmployeeID END) * 100.0) / COUNT(DISTINCT e.EmployeeID) AS AttritionRate
348 FROM Employee e
349 JOIN LatestPerformance lp ON e.EmployeeID = lp.EmployeeID AND lp.rn = 1
350 JOIN SatisfiedLevel sl ON lp.EnvironmentSatisfaction = sl.SatisfactionID
351 GROUP BY sl.SatisfactionLevel
352 ORDER BY AttritionRate DESC;
353

```

Results Messages

	SatisfactionLevel	TotalEmployees	AttritionEmployees	AttritionRate
1	Neutral	2211	776	35.097241067390
2	Very Satisfied	2046	700	34.213098729227
3	Satisfied	2175	706	32.459770114942
4	Dissatisfied	141	44	31.205673758865
5	Very Dissatisfied	136	35	25.735294117647

	SatisfactionLevel	TotalEmployees	AttritionEmployees	AttritionRate
1	Dissatisfied	62	16	25.806451612903
2	Very Dissatisfied	51	11	21.568627450980
3	Very Satisfied	343	66	19.241982507288
4	Neutral	431	82	19.025522041763
5	Satisfied	393	62	15.776081424936

```

354 -- 14. Do employees with higher education levels have lower attrition rates?
355 SELECT el.EducationLevel,
356     COUNT(*) AS TotalEmployees,
357     SUM(CASE WHEN e.Attrition = 'Yes' THEN 1 ELSE 0 END) AS AttritionEmployees,
358     (SUM(CASE WHEN e.Attrition = 'Yes' THEN 1 ELSE 0 END) * 100.0) / COUNT(*) AS AttritionRate
359 FROM Employee e
360 LEFT JOIN EducationLevel el ON e.Education = el.EducationLevelID
361 GROUP BY el.EducationLevel
362 ORDER BY AttritionRate ASC;
363
364 -- 15. How does tenure (years at company) impact attrition?
365 WITH EmployeeTenure AS (
366     SELECT
367         e.EmployeeID,
368         e.YearsAtCompany, -- Use the original YearsAtCompany value instead of recalculating it
369         e.Attrition,
370         ROW_NUMBER() OVER (PARTITION BY e.EmployeeID ORDER BY e.HireDate ASC) AS rn
371     FROM Employee e
372 )
373 -- Step 2: Calculate attrition rate based on unique employees
374 SELECT
375     YearsAtCompany,
376     COUNT(EmployeeID) AS TotalEmployees, -- Count total unique employees per tenure
377     SUM(CASE WHEN Attrition = 'Yes' THEN 1 ELSE 0 END) AS AttritionEmployees, -- Count employees who left
378     (SUM(CASE WHEN Attrition = 'Yes' THEN 1 ELSE 0 END) * 100.0) / COUNT(EmployeeID) AS AttritionRate -- Calculate attrition rate (%)
379 FROM EmployeeTenure
380 WHERE rn = 1 -- Select only the first record for each employee
381 GROUP BY YearsAtCompany
382 ORDER BY YearsAtCompany ASC;
383

```

Results Messages

	EducationLevel	TotalEmployees	AttritionEmployees	AttritionRate
1	Doctorate	48	5	10.416666666666
2	Masters	398	58	14.572864321608
3	High School	282	44	15.602836879432
4	Bachelors	572	99	17.307692307692
5	No Formal Qualifications	170	31	18.235294117647

	YearsAtCompany	TotalEmployees	AttritionEmployees	AttritionRate
1	0	190	60	31.578947368421
2	1	177	61	34.463276836158
3	2	124	25	20.161290322580
4	3	148	24	16.216216216216
5	4	129	15	11.627906976744
6	5	115	20	17.391304347826
7	6	101	11	10.891089108910
8	7	121	9	7.438016528925
9	8	119	6	5.042016806722
10	9	118	5	4.237288135593
11	10	128	1	0.781250000000

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 Estimated Plan Enable Actual Plan Parse Enable SQLCMD To Note

```

384 -- Fourth Category
385 -- Promotion & Career Growth
386 -- 16. How long does it take, on average, for employees to receive a promotion?
387 SELECT
388   CAST(AVG(CAST(e.YearsSinceLastPromotion AS DECIMAL(18, 6))) AS DECIMAL(18, 6)) AS AveragePromotionTime
389 FROM Employee e;
390
391 -- 17. Is there a correlation between education level and promotion frequency?
392 SELECT
393   el.EducationLevel,
394   AVG(CAST(e.YearsSinceLastPromotion AS FLOAT)) AS AvgYearsSinceLastPromotion -- Calculate the average time to promotion
395 FROM Employee e
396 LEFT JOIN EducationLevel el ON e.Education = el.EducationLevelID
397 GROUP BY el.EducationLevel
398 ORDER BY AvgYearsSinceLastPromotion ASC;
399
400 -- 18. Which departments promote employees the fastest and the slowest?
401 SELECT e.Department,
402   CAST(AVG(CAST(e.YearsSinceLastPromotion AS DECIMAL(18, 6))) AS DECIMAL(18, 6)) AS AveragePromotionTime
403 FROM Employee e
404 GROUP BY e.Department
405 ORDER BY AveragePromotionTime ASC; -- Fastest promotion first
406
  
```

Results Messages

	AveragePromotionTime
1	3.440816

	EducationLevel	AvgYearsSinceLastPromotion
1	Masters	3.1231155778894473
2	Bachelors	3.3933566433566433
3	No Formal Qualifications	3.5823529411764707
4	Doctorate	3.6875
5	High School	3.858156028368794

	Department	AveragePromotionTime
1	Sales	3.260089
2	Human Resources	3.285714
3	Technology	3.534859

```

407 -- 19. What percentage of satisfied employees receive promotions?
408 -- 19.1. Select the first job satisfaction rating for each employee
409 WITH FirstSatisfaction AS (
410     SELECT
411         e.EmployeeID,
412         pr.JobSatisfaction,
413         e.YearsSinceLastPromotion,
414         ROW_NUMBER() OVER (PARTITION BY e.EmployeeID ORDER BY e.YearsSinceLastPromotion ASC) AS row_num
415     FROM Employee e
416     JOIN PerformanceRating pr ON e.EmployeeID = pr.EmployeeID
417 )
418 -- 19.2. Calculate the total number of employees and the number of promoted employees by job satisfaction level
419 , PromotionStats AS (
420     SELECT
421         JobSatisfaction,
422         COUNT(DISTINCT EmployeeID) AS TotalEmployees, -- Ensure each employee is counted only once
423         COUNT(DISTINCT CASE WHEN YearsSinceLastPromotion = 0 THEN EmployeeID END) AS PromotedEmployees
424     FROM FirstSatisfaction
425     WHERE row_num = 1 -- Select only the first record per employee
426     GROUP BY JobSatisfaction
427 )
428 -- 19.3. Compute the promotion percentage by job satisfaction level
429 SELECT
430     JobSatisfaction,
431     TotalEmployees,
432     PromotedEmployees,
433     (PromotedEmployees * 100.0) / NULLIF(TotalEmployees, 0) AS PromotionPercentage
434 FROM PromotionStats
435 ORDER BY JobSatisfaction;
436

```

Results Messages

	JobSatisfaction	TotalEmployees	PromotedEmployees	PromotionPercentage
1	1	40	6	15.000000000000
2	2	332	33	9.939759036144
3	3	335	48	14.328358208955
4	4	302	37	12.251655629139
5	5	271	35	12.915129151291

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Database: HR_Analysis_DataBase ✓

▪ Estimated Plan ▪ Enable Actual Plan ✓ Pars

```
437 -- 20. Does gender impact promotion opportunities?
438 WITH UniqueEmployees AS (
439     SELECT
440         e.EmployeeID,
441         e.Gender,
442         e.YearsSinceLastPromotion
443     FROM Employee e
444     -- Ensure each employee appears only once based on first promotion date
445     WHERE e.YearsSinceLastPromotion = (
446         SELECT MIN(e2.YearsSinceLastPromotion)
447         FROM Employee e2
448         WHERE e2.EmployeeID = e.EmployeeID
449     )
450 )
451 SELECT
452     Gender,
453     COUNT(CASE WHEN YearsSinceLastPromotion = 0 THEN 1 END) AS PromotionFrequency,
454     COUNT(*) AS TotalEmployees,
455     (COUNT(CASE WHEN YearsSinceLastPromotion = 0 THEN 1 END) * 100.0) / COUNT(*) AS PromotionRate
456 FROM UniqueEmployees
457 GROUP BY Gender
458 ORDER BY PromotionRate DESC;
459
```

Results Messages

	Gender	PromotionFrequency	TotalEmployees	PromotionRate
1	Prefer Not To Say	6	20	30.000000000000
2	Male	139	651	21.351766513056
3	Female	133	675	19.703703703703
4	Non-Binary	23	124	18.548387096774

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Database: HR_Analysis_DataBase ▾

Estimated Plan ▾ Enable Actual Plan ▾ Parse

```
460 ----- Additional Questions -----
461 
462 -- 21. Calculate the total salary of all employees
463 SELECT SUM(Salary) AS total_salary
464 FROM (
465     SELECT DISTINCT EmployeeID, Salary
466     FROM Employee
467 ) AS unique_salaries;
468 
469 -- 22. Calculate total salary distribution by department
470 SELECT Department, SUM(Salary) AS total_salary
471 FROM (
472     -- Select distinct EmployeeID and Salary to avoid duplicate salary calculations
473     SELECT DISTINCT EmployeeID, Department, Salary
474     FROM Employee
475 ) AS unique_salaries
476 GROUP BY Department;
477 
478 -- 23. Calculate the number of employees hired in each year
479 SELECT
480     YEAR(HireDate) AS Year,
481     COUNT(DISTINCT EmployeeID) AS EmployeeCount
482 FROM Employee
483 GROUP BY YEAR(HireDate)
484 ORDER BY Year;
485
```

Results Messages

	total_salary ▾
1	166046052

	Department ▾	total_salary ▾
1	Sales	53126454
2	Human Resources	7541025
3	Technology	105378573

	Year ▾	EmployeeCount ▾
1	2012	151
2	2013	136
3	2014	136
4	2015	127
5	2016	114
6	2017	106
7	2018	136
8	2019	145
9	2020	127
10	2021	137
11	2022	155

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```
486 -- 24. Calculate the Number of Employees based on BusinessTravel and Attrition
487 SELECT
488     BusinessTravel,
489     Attrition,
490     COUNT(DISTINCT EmployeeID) AS EmployeeCount
491 FROM Employee
492 GROUP BY BusinessTravel, Attrition
493 ORDER BY BusinessTravel, Attrition;
494
495 -- 25. Calculate the Number of Employees based on OverTime and Attrition
496 -- Count unique employees based on OverTime and Attrition
497 SELECT
498     OverTime,
499     Attrition,
500     COUNT(DISTINCT EmployeeID) AS EmployeeCount
501 FROM Employee
502 GROUP BY OverTime, Attrition
503 ORDER BY OverTime, Attrition;
504
```

Results Messages

	BusinessTravel ▾	Attrition ▾	EmployeeCount ▾
1	Frequent Traveller	No	208
2	Frequent Traveller	Yes	69
3	No Travel	No	138
4	No Travel	Yes	12
5	Some Travel	No	887
6	Some Travel	Yes	156

	OverTime ▾	Attrition ▾	EmployeeCount ▾
1	No	No	944
2	No	Yes	110
3	Yes	No	289
4	Yes	Yes	127

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```
505  -- 26.1 Define the age ranges of Employees
506  WITH AgeRanges AS (
507      SELECT
508          EmployeeID,
509          CASE
510              WHEN Age >= 20 AND Age < 30 THEN '20-30'
511              WHEN Age >= 30 AND Age < 40 THEN '30-40'
512              WHEN Age >= 40 AND Age < 50 THEN '40-50'
513              WHEN Age >= 50 AND Age < 60 THEN '50-60'
514              WHEN Age >= 60 AND Age < 70 THEN '60-70'
515              ELSE 'Other'
516          END AS AgeRange
517      FROM Employee
518      WHERE Age IS NOT NULL -- Exclude employees with missing age
519  )
520
521  -- Count employees in each age range
522  , AgeRangeCount AS (
523      SELECT AgeRange, COUNT(DISTINCT EmployeeID) AS EmployeeCount
524      FROM AgeRanges
525      GROUP BY AgeRange
526  )
527
528  -- Display age range counts
529  SELECT * FROM AgeRangeCount
530  ORDER BY EmployeeCount DESC;
531
532  -- 26.2 Find the minimum and maximum age of employees (no duplicates)
533  SELECT
534      MIN(Age) AS MinAge,
535      MAX(Age) AS MaxAge
536  FROM Employee
537  WHERE Age IS NOT NULL;
```

Results Messages

	AgeRange ▾	EmployeeCount ▾
1	20-30	874
2	30-40	289
3	40-50	219
4	Other	81
5	50-60	7

	MinAge ▾	MaxAge ▾
1	18	51

```
539 -- 27. Calculate the correlation between ManagerRating and JobSatisfaction
540 WITH PerformanceManagerRating AS (
541     -- Merge all necessary tables (Employee, PerformanceRating, EducationLevel, SatisfiedLevel, RatingLevel)
542     SELECT
543         e.EmployeeID,
544         p.ManagerRating,
545         p.JobSatisfaction
546     FROM Employee e
547     JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
548     JOIN EducationLevel el ON e.Education = el.EducationLevelID
549     JOIN SatisfiedLevel sl ON p.EnvironmentSatisfaction = sl.SatisfactionID
550     JOIN RatingLevel rl ON p.ManagerRating = rl.RatingID
551     WHERE p.ManagerRating IS NOT NULL AND p.JobSatisfaction IS NOT NULL
552 )
553
554 -- Calculate the mean of JobSatisfaction for each ManagerRating
555 SELECT
556     ManagerRating,
557     AVG(JobSatisfaction) AS AverageJobSatisfaction
558 FROM PerformanceManagerRating
559 GROUP BY ManagerRating
560 ORDER BY ManagerRating;
```

561

Results Messages

	ManagerRating	AverageJobSatisfaction
1	2	3
2	3	3
3	4	3
4	5	3


```

562  -- 28. Count employees hired per year and Count employees who left (attrition) by each department
563  WITH HireCounts AS (
564      SELECT
565          YEAR(HireDate) AS Year,
566          Department,
567          COUNT(DISTINCT EmployeeID) AS EmployeesHired
568      FROM Employee
569      GROUP BY YEAR(HireDate), Department
570  ),
571  AttritionCounts AS (
572      SELECT
573          YEAR(HireDate) AS Year,
574          Department,
575          COUNT(DISTINCT EmployeeID) AS EmployeesLeft
576      FROM Employee
577      WHERE Attrition = 'Yes'
578      GROUP BY YEAR(HireDate), Department
579  )
580  SELECT
581      COALESCE(h.Year, a.Year) AS Year,
582      COALESCE(h.Department, a.Department) AS Department,
583      COALESCE(h.EmployeesHired, 0) AS EmployeesHired,
584      COALESCE(a.EmployeesLeft, 0) AS EmployeesLeft
585  FROM HireCounts h
586  FULL OUTER JOIN AttritionCounts a
587  ON h.Year = a.Year AND h.Department = a.Department
588  ORDER BY Year, Department;
589

```

Results Messages

	Year	Department	EmployeesHired	EmployeesLeft
1	2012	Human Resources	12	3
2	2012	Sales	49	9
3	2012	Technology	90	12
4	2013	Human Resources	4	0
5	2013	Sales	39	12
6	2013	Technology	93	11
7	2014	Human Resources	4	2
8	2014	Sales	49	8
9	2014	Technology	83	13
10	2015	Human Resources	5	1
11	2015	Sales	34	7
12	2015	Technology	88	7
13	2016	Human Resources	2	0
14	2016	Sales	35	8
15	2016	Technology	77	16
16	2017	Human Resources	7	1
17	2017	Sales	23	3
18	2017	Technology	76	7
19	2018	Human Resources	5	1
20	2018	Sales	43	11
21	2018	Technology	88	10
22	2019	Human Resources	3	0
23	2019	Sales	41	5
24	2019	Technology	101	16
25	2020	Human Resources	6	1
26	2020	Sales	41	13
27	2020	Technology	80	14
28	2021	Human Resources	6	1
29	2021	Sales	44	8
30	2021	Technology	87	12
31	2022	Human Resources	9	2
32	2022	Sales	48	8
33	2022	Technology	98	15

```

590 -- 29. What is the most common reason for employee turnover?
591 -- JobRole
592 SELECT TOP 1 JobRole, COUNT(DISTINCT e.EmployeeID) AS Count
593 FROM Employee e
594 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
595 WHERE eAttrition = 'Yes'
596 GROUP BY JobRole
597 ORDER BY Count DESC;
598
599 -- BusinessTravel
600 SELECT TOP 1 BusinessTravel, COUNT(DISTINCT e.EmployeeID) AS Count
601 FROM Employee e
602 WHERE eAttrition = 'Yes'
603 GROUP BY BusinessTravel
604 ORDER BY Count DESC;
605
606 -- OverTime
607 SELECT TOP 1 OverTime, COUNT(DISTINCT e.EmployeeID) AS Count
608 FROM Employee e
609 WHERE eAttrition = 'Yes'
610 GROUP BY OverTime
611 ORDER BY Count DESC;
612
613 -- JobSatisfaction
614 SELECT TOP 1 CAST(JobSatisfaction AS DECIMAL(3,2)) AS JobSatisfaction, COUNT(DISTINCT e.EmployeeID) AS Count
615 FROM Employee e
616 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
617 WHERE eAttrition = 'Yes'
618 GROUP BY JobSatisfaction
619 ORDER BY Count DESC;
620
621 -- ManagerRating
622 SELECT TOP 1 CAST(ManagerRating AS DECIMAL(3,2)) AS ManagerRating, COUNT(DISTINCT e.EmployeeID) AS Count
623 FROM Employee e
624 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
625 WHERE eAttrition = 'Yes'
626 GROUP BY ManagerRating
627 ORDER BY Count DESC;
628
629 -- WorkLifeBalance
630 SELECT TOP 1 CAST(WorkLifeBalance AS DECIMAL(3,2)) AS WorkLifeBalance, COUNT(DISTINCT e.EmployeeID) AS Count
631 FROM Employee e
632 JOIN PerformanceRating p ON e.EmployeeID = p.EmployeeID
633 WHERE eAttrition = 'Yes'
634 GROUP BY WorkLifeBalance
635 ORDER BY Count DESC;
636

```

Results

	JobRole	Count
1	Data Scientist	62

	BusinessTravel	Count
1	Some Travel	156

	OverTime	Count
1	Yes	127

	JobSatisfaction	Count
1	5.00	224

	ManagerRating	Count
1	3.00	235

	WorkLifeBalance	Count
1	4.00	228

```

637 ----- Ending of Week 2: Analysis Questions Phase -----
638 ----- Week 3: Forecasting Questions Phase -----
639
640 -- 1. Predict attrition for the next 3 years
641 WITH EmployeeStatus AS (
642     SELECT
643         EmployeeID,
644         YEAR(HireDate) AS HireYear,
645         CASE
646             WHEN Attrition = 'Yes' THEN YEAR(HireDate) + YearsAtCompany
647             ELSE NULL
648         END AS ExitYear
649     FROM Employee
650 ),
651 Years AS (
652     SELECT 2012 AS Year
653     UNION ALL SELECT 2013
654     UNION ALL SELECT 2014
655     UNION ALL SELECT 2015
656     UNION ALL SELECT 2016
657     UNION ALL SELECT 2017
658     UNION ALL SELECT 2018
659     UNION ALL SELECT 2019
660     UNION ALL SELECT 2020
661     UNION ALL SELECT 2021
662     UNION ALL SELECT 2022
663 ),
664 YearlyAttrition AS (
665     SELECT
666         y.Year,
667         COUNT(DISTINCT e.EmployeeID) AS ActiveEmployees,
668         COUNT(DISTINCT CASE WHEN e.ExitYear = y.Year THEN e.EmployeeID END) AS ExitedEmployees
669     FROM Years y
670     LEFT JOIN EmployeeStatus e
671         ON y.Year BETWEEN e.HireYear AND ISNULL(e.ExitYear, 9999)
672     GROUP BY y.Year
673 ),
674 WithRates AS (
675     SELECT
676         Year,
677         ActiveEmployees,
678         ExitedEmployees,
679         CAST(ExitedEmployees AS FLOAT) / NULLIF(ActiveEmployees, 0) AS AttritionRate
680     FROM YearlyAttrition
681 ),
682 PredictedYears AS (
683     SELECT 2023 AS Year
684     UNION ALL SELECT 2024
685     UNION ALL SELECT 2025
686 ),
687 Predicted AS (
688     SELECT
689         p.Year,
690         NULL AS ActiveEmployees,
691         NULL AS ExitedEmployees,
692         (SELECT AVG(AttritionRate) FROM WithRates) AS AttritionRate
693     FROM PredictedYears p
694 )
695 SELECT * FROM WithRates
696 UNION ALL
697 SELECT * FROM Predicted
698 ORDER BY Year;
699

```

Results Messages

	Year	ActiveEmployees	ExitedEmployees	AttritionRate
1	2012	151	0	0
2	2013	287	2	0.006968641114982578
3	2014	421	10	0.023752969121140142
4	2015	538	11	0.020446096654275093
5	2016	641	12	0.0187207488299532
6	2017	735	14	0.01904761904761905
7	2018	857	21	0.024504084014002333
8	2019	981	21	0.021406727828746176
9	2020	1087	32	0.029438822447102116
10	2021	1192	60	0.050335570469798654
11	2022	1287	54	0.04195804195804196
12	2023	NULL	NULL	0.023325392862332848
13	2024	NULL	NULL	0.023325392862332848
14	2025	NULL	NULL	0.023325392862332848

▶ Run □ Cancel ⌂ Disconnect ⌂ Change | Database: HR_Analysis_DataBase ▼ | Estimated Plan Enable Actual Plan Parse Disable SQLCMD

```

700  -- 2. Predict Salary Growth Projection for next 3 years
701  -- Create year list from 2012 to 2025
702  WITH Years AS (
703      SELECT 2012 AS Year
704      UNION ALL SELECT 2013
705      UNION ALL SELECT 2014
706      UNION ALL SELECT 2015
707      UNION ALL SELECT 2016
708      UNION ALL SELECT 2017
709      UNION ALL SELECT 2018
710      UNION ALL SELECT 2019
711      UNION ALL SELECT 2020
712      UNION ALL SELECT 2021
713      UNION ALL SELECT 2022
714      UNION ALL SELECT 2023
715      UNION ALL SELECT 2024
716      UNION ALL SELECT 2025
717  ),
718  -- Generate salary history based on YearsAtCompany
719  SalaryHistory AS (
720      SELECT
721          EmployeeID,
722          YEAR(HireDate) + diff.num AS Year,
723          Salary * POWER(1.0 + 0.0, diff.num) AS EstimatedSalary -- Placeholder
724      FROM Employee
725      CROSS APPLY (
726          SELECT TOP (YearsAtCompany)
727              ROW_NUMBER() OVER (ORDER BY (SELECT NULL)) - 1 AS num
728          FROM master.dbo.spt_values
729      ) AS diff
730  ),
731  -- Calculate annual salary growth rates
732  SalaryDiffs AS (
733      SELECT
734          s1.EmployeeID,
735          s1.Year AS Year1,
736          s2.Year AS Year2,
737          s1.EstimatedSalary AS Salary1,
738          s2.EstimatedSalary AS Salary2,
739          (s2.EstimatedSalary - s1.EstimatedSalary) / NULLIF(s1.EstimatedSalary, 0) AS GrowthRate
740      FROM SalaryHistory s1
741      JOIN SalaryHistory s2
742          ON s1.EmployeeID = s2.EmployeeID AND s2.Year = s1.Year + 1
743  ),
744  -- Get average growth rate
745  AvgGrowth AS (
746      SELECT AVG(GrowthRate) AS AvgSalaryGrowthRate FROM SalaryDiffs
747  ),
748  -- Actual salary stats for years with real data
749  ActualYearlySalaries AS (
750      SELECT
751          Year,
752          COUNT(EmployeeID) AS EmployeeCount,
753          ROUND(AVG(EstimatedSalary), 2) AS AvgSalary
754      FROM SalaryHistory
755      WHERE Year BETWEEN 2012 AND 2022
756      GROUP BY Year
757  ),
758  -- Get current salary of employees
759  CurrentSalaries AS (
760      SELECT EmployeeID, MAX(Salary) AS CurrentSalary FROM Employee GROUP BY EmployeeID
761  ),
762  -- Predict salaries for future years
763  FutureYears AS (
764      SELECT 2023 AS Year
765      UNION ALL SELECT 2024
766      UNION ALL SELECT 2025
767  ),
768  PredictedSalaries AS (
769      SELECT
770          f.Year,
771          c.EmployeeID,
772          ROUND(c.CurrentSalary * POWER(1 + a.AvgSalaryGrowthRate, f.Year - 2022), 2) AS PredictedSalary
773      FROM FutureYears f
774      CROSS JOIN CurrentSalaries c
775      CROSS JOIN AvgGrowth a
776  ),
777  PredictedSummary AS (
778      SELECT
779          Year,
780          COUNT(EmployeeID) AS EmployeeCount,
781          ROUND(AVG(PredictedSalary), 2) AS AvgSalary
782      FROM PredictedSalaries
783      GROUP BY Year
784  ),
785  -- Combine actual and predicted data
786  Combined AS (
787      SELECT * FROM ActualYearlySalaries
788      UNION ALL
789      SELECT * FROM PredictedSummary
790  )
791  -- Final output ordered by year
792  SELECT
793      Year,
794      EmployeeCount,
795      AvgSalary AS AvgPredictedSalary
796  FROM Combined
797  ORDER BY Year;
798
  
```

Results Messages

	Year ▼	EmployeeCount ▼	AvgPredictedSalary ▼
1	2012	151	136773.930000
2	2013	285	137074.110000
3	2014	411	135078.770000
4	2015	527	126447.560000
5	2016	629	120242.230000
6	2017	721	117671.860000
7	2018	836	116033.800000
8	2019	960	115259.110000
9	2020	1055	118218.840000
10	2021	1132	120017.600000
11	2023	1470	112956.500000
12	2024	1470	112956.500000
13	2025	1470	112956.500000

```
799 -- 3. Prediction workforce in 3 years by Department, Age Group & Education Level
800 WITH EducationMapping AS (
801     SELECT 1 AS EducationLevel, 'High School' AS EducationName
802     UNION ALL SELECT 2, 'Associate Degree'
803     UNION ALL SELECT 3, 'Bachelor''s Degree'
804     UNION ALL SELECT 4, 'Master''s Degree'
805     UNION ALL SELECT 5, 'PhD'
806 ),
807 EmployeeStatus AS (
808     SELECT
809         e.EmployeeID,
810         e.Department,
811         CASE
812             WHEN e.Age BETWEEN 18 AND 30 THEN '18-30'
813             WHEN e.Age BETWEEN 31 AND 40 THEN '31-40'
814             WHEN e.Age BETWEEN 41 AND 50 THEN '41-50'
815             WHEN e.Age BETWEEN 51 AND 60 THEN '51-60'
816             ELSE '60+'
817         END AS AgeGroup,
818         el.EducationLevel AS Education, -- Mapping EducationLevelID to Education Name
819         em.EducationName AS EducationName, -- Mapping numeric value to actual name
820         e.HireDate,
821         DATEDIFF(YEAR, e.HireDate, GETDATE()) AS YearsAtCompany,
822         YEAR(GETDATE()) AS CurrentYear
823     FROM Employee e
824     LEFT JOIN EducationLevel el ON e.Education = el.EducationLevelID
825     LEFT JOIN EducationMapping em ON el.EducationLevelID = em.EducationLevel
826 ),
827 EmployeeCounts AS (
828     SELECT
829         Department,
830         AgeGroup,
831         EducationName AS Education,
832         COUNT(e.EmployeeID) AS EmployeeCount,
833         CurrentYear
834     FROM EmployeeStatus e
835     GROUP BY Department, AgeGroup, EducationName, CurrentYear
836 ),
837 YearlyGrowthRate AS (
838     SELECT
839         Department,
840         AgeGroup,
841         Education,
842         EmployeeCount,
843         CAST(EmployeeCount AS FLOAT) / NULLIF(LAG(EmployeeCount) OVER (PARTITION BY Department, AgeGroup, Education ORDER BY CurrentYear), 0) AS GrowthRate
844     FROM EmployeeCounts
845 ),
846 PredictedYears AS (
847     SELECT 2023 AS Year
848     UNION ALL SELECT 2024
849     UNION ALL SELECT 2025
850 )
851 SELECT
852     p.Year,
853     ec.Department,
854     ec.AgeGroup,
855     ec.Education,
856     ROUND(ec.EmployeeCount * COALESCE(yg.GrowthRate, 1), 0) AS PredictedEmployeeCount
857 FROM PredictedYears p
858 JOIN EmployeeCounts ec ON 1 = 1 -- Cross join to apply prediction across all combinations
859 LEFT JOIN YearlyGrowthRate yg
860     ON ec.Department = yg.Department
861     AND ec.AgeGroup = yg.AgeGroup
862     AND ec.Education = yg.Education
863 ORDER BY p.Year, ec.Department, ec.AgeGroup, ec.Education;
864
865 ----- Ending of Week 3: Forecasting Questions Phase -----
866
```

Results	Messages						
	Year	Department	AgeGrp	Education	PredictedEmployeeCount		
1	2023	Human_Resources	18-39	Associate_Degree	16		
2	2023	Human_Resources	18-39	Bachelor's_Degree	18		
3	2023	Human_Resources	18-39	High_School	2		
4	2023	Human_Resources	18-39	Master's_Degree	18		
5	2023	Human_Resources	18-39	PhD	3		
6	2023	Human_Resources	30-49	Associate_Degree	1		
7	2023	Human_Resources	30-49	Bachelor's_Degree	4		
8	2023	Human_Resources	30-49	High_School	2		
9	2023	Human_Resources	30-49	Master's_Degree	3		
10	2023	Human_Resources	40-59	Associate_Degree	2		
11	2023	Human_Resources	40-59	Bachelor's_Degree	5		
12	2023	Human_Resources	40-59	High_School	1		
13	2023	Human_Resources	40-59	Master's_Degree	2		
14	2023	Sales	18-39	Associate_Degree	56		
15	2023	Sales	18-39	Bachelor's_Degree	181		
16	2023	Sales	18-39	High_School	48		
17	2023	Sales	18-39	Master's_Degree	86		
18	2023	Sales	18-39	PhD	9		
19	2023	Sales	30-49	Associate_Degree	21		
20	2023	Sales	30-49	Bachelor's_Degree	29		
21	2023	Sales	30-49	High_School	1		
22	2023	Sales	30-49	Master's_Degree	27		
23	2023	Sales	30-49	PhD	5		
24	2023	Sales	40-59	Associate_Degree	18		
25	2023	Sales	40-59	Bachelor's_Degree	36		
26	2023	Sales	40-59	High_School	9		
27	2023	Sales	40-59	Master's_Degree	15		
28	2023	Sales	40-59	PhD	1		
29	2023	Technology	18-39	Associate_Degree	126		
30	2023	Technology	18-39	Bachelor's_Degree	278		
31	2023	Technology	18-39	High_School	21		
32	2023	Technology	18-39	Master's_Degree	176		
33	2023	Technology	18-39	PhD	21		
34	2023	Technology	30-49	Associate_Degree	39		
35	2023	Technology	30-49	Bachelor's_Degree	65		
36	2023	Technology	30-49	High_School	26		
37	2023	Technology	30-49	Master's_Degree	51		
38	2023	Technology	30-49	PhD	4		
39	2023	Technology	40-59	Associate_Degree	17		
40	2023	Technology	40-59	Bachelor's_Degree	43		
41	2023	Technology	40-59	High_School	18		
42	2023	Technology	40-59	Master's_Degree	28		
43	2023	Technology	40-59	PhD	5		
44	2023	Technology	50-69	Bachelor's_Degree	3		
45	2024	Human_Resources	18-39	Associate_Degree	18		
46	2024	Human_Resources	18-39	Bachelor's_Degree	18		
47	2024	Human_Resources	18-39	High_School	2		
48	2024	Human_Resources	18-39	Master's_Degree	18		
49	2024	Human_Resources	18-39	PhD	3		
50	2024	Human_Resources	30-49	Associate_Degree	1		
51	2024	Human_Resources	30-49	Bachelor's_Degree	4		
52	2024	Human_Resources	30-49	High_School	2		
53	2024	Human_Resources	30-49	Master's_Degree	3		
54	2024	Human_Resources	40-59	Associate_Degree	2		
55	2024	Human_Resources	40-59	Bachelor's_Degree	5		
56	2024	Human_Resources	40-59	High_School	1		
57	2024	Human_Resources	40-59	Master's_Degree	2		
58	2024	Sales	18-39	Associate_Degree	56		
59	2024	Sales	18-39	Bachelor's_Degree	181		
60	2024	Sales	18-39	High_School	48		
61	2024	Sales	18-39	Master's_Degree	86		
62	2024	Sales	18-39	PhD	9		
63	2024	Sales	30-49	Associate_Degree	21		
64	2024	Sales	30-49	Bachelor's_Degree	29		
65	2024	Sales	30-49	High_School	1		
66	2024	Sales	30-49	Master's_Degree	27		
67	2024	Sales	40-59	Associate_Degree	5		
68	2024	Sales	40-59	Bachelor's_Degree	36		
69	2024	Sales	40-59	High_School	9		
70	2024	Sales	40-59	Master's_Degree	15		
71	2024	Technology	18-39	Associate_Degree	126		
72	2024	Technology	18-39	Bachelor's_Degree	278		
73	2024	Technology	18-39	High_School	21		
74	2024	Technology	18-39	Master's_Degree	176		
75	2024	Technology	18-39	PhD	21		
76	2024	Technology	30-49	Associate_Degree	39		
77	2024	Technology	30-49	Bachelor's_Degree	65		
78	2024	Technology	30-49	High_School	26		
79	2024	Technology	30-49	Master's_Degree	51		
80	2024	Technology	30-49	PhD	4		
81	2024	Technology	40-59	Associate_Degree	17		
82	2024	Technology	40-59	Bachelor's_Degree	43		
83	2024	Technology	40-59	High_School	18		
84	2024	Technology	40-59	Master's_Degree	28		
85	2024	Technology	40-59	PhD	5		
86	2024	Technology	50-69	Bachelor's_Degree	3		
87	2024	Technology	50-69	High_School	4		
88	2024	Technology	50-69	Master's_Degree	3		
89	2025	Human_Resources	18-39	Associate_Degree	18		
90	2025	Human_Resources	18-39	Bachelor's_Degree	18		
91	2025	Human_Resources	18-39	High_School	2		
92	2025	Human_Resources	18-39	Master's_Degree	18		
93	2025	Human_Resources	18-39	PhD	3		
94	2025	Human_Resources	30-49	Associate_Degree	1		
95	2025	Human_Resources	30-49	Bachelor's_Degree	4		
96	2025	Human_Resources	30-49	High_School	2		
97	2025	Human_Resources	30-49	Master's_Degree	3		
98	2025	Human_Resources	40-59	Associate_Degree	2		
99	2025	Human_Resources	40-59	Bachelor's_Degree	5		
100	2025	Human_Resources	40-59	High_School	1		
101	2025	Human_Resources	40-59	Master's_Degree	2		
102	2025	Sales	18-39	Associate_Degree	56		
103	2025	Sales	18-39	Bachelor's_Degree	181		
104	2025	Sales	18-39	High_School	48		
105	2025	Sales	18-39	Master's_Degree	86		
106	2025	Sales	18-39	PhD	9		
107	2025	Sales	30-49	Associate_Degree	21		
108	2025	Sales	30-49	Bachelor's_Degree	29		
109	2025	Sales	30-49	High_School	1		
110	2025	Sales	30-49	Master's_Degree	27		
111	2025	Sales	40-59	Associate_Degree	5		
112	2025	Sales	40-59	Bachelor's_Degree	36		
113	2025	Sales	40-59	High_School	9		
114	2025	Sales	40-59	Master's_Degree	15		
115	2025	Sales	40-59	PhD	1		
116	2025	Technology	18-39	Associate_Degree	126		
117	2025	Technology	18-39	Bachelor's_Degree	278		
118	2025	Technology	18-39	High_School	21		
119	2025	Technology	18-39	Master's_Degree	176		
120	2025	Technology	18-39	PhD	21		
121	2025	Technology	30-49	Associate_Degree	39		
122	2025	Technology	30-49	Bachelor's_Degree	65		
123	2025	Technology	30-49	High_School	26		
124	2025	Technology	30-49	Master's_Degree	51		
125	2025	Technology	30-49	PhD	4		
126	2025	Technology	40-59	Associate_Degree	17		
127	2025	Technology	40-59	Bachelor's_Degree	43		
128	2025	Technology	40-59	High_School	18		
129	2025	Technology	40-59	Master's_Degree	28		
130	2025	Technology	40-59	PhD	5		
131	2025	Technology	50-69	Bachelor's_Degree	1		
132	2025	Technology	50-69	High_School	1		