INTERNSHIP BY PSYLIQ

EMPLOYEE DATA ANALYSIS

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1). Can you create a pivot table to summarize the Total number of employees in each department?

Department	No. of Employees
Admin Offices	80
Executive Office	24
IT/IS	430
Production	2020
Sales	331
Software Engineering	115
Grand Total	3000

2). Apply conditional formatting to highlight employees with a "Performance Score" below 3 in red.

THERE ARE 2548 EMPLOYEE WHO HAVE PERFORMANCE SCORE BELOW 3.

JobFunc	Gender	Location	RaceDe	Marital	Performance Score	Current Employee Ratin	Performance Score Rating
Technician	Male	71071	Other	Divorced	Exceeds	3	4
Foreman	Male	12122	Black	Divorced	Fully Meets	2	3
Engineer	Male	87065	White	Widowed	Fully Meets	4	3
Foreman	Male	10415	Hispanic	Married	Needs Improvement	4	2
Manager	Male	3763	Other	Widowed	Exceeds	4	4
Technician	Female	79623	Black	Divorced	Fully Meets	3	3
Technician	Female	69189	White	Divorced	Needs Improvement	3	2
Laborer	Female	5194	Hispanic	Single	Needs Improvement	3	2
Splicer	Male	8779	Black	Widowed	Exceeds	2	4
Lineman	Male	74682	Asian	Married	Fully Meets	3	3
Foreman	Male	78046	Hispanic	Married	Needs Improvement	1	2
Coordinate	Male	27270	Hispanic	Divorced	Needs Improvement	3	2
Tower Har	Male	12703	Hispanic	Single	Fully Meets	1	3
Mechanic	Male	66835	Black	Widowed	Needs Improvement	5	2
Flagger	Male	66150	Asian	Divorced	Needs Improvement	3	2
Supervisor	Male	64288	Other	Married	Exceeds	4	4
Engineer	Female	94333	Asian	Divorced	Exceeds	1	4
Foreman	Female	45453	Black	Single	Fully Meets	4	3
Driver	Female	81905	Asian	Divorced	Needs Improvement	3	2
Technician	Female	12491	Black	Married	Needs Improvement	3	2
Foreman	Male	64350	Asian	Married	Fully Meets	4	3
Director	Male	74124	Other	Married	Exceeds	4	4
Manager	Male	33379	Hispanic	Widowed	Exceeds	2	4
Laborer	Male	34481	Other	Divorced	Fully Meets	2	3
Foreman	Male	90406	Asian	Widowed	Fully Meets	2	3
Engineer	Male	95774	Asian	Divorced	Needs Improvement	2	2
Laborer	Female	16058	Asian	Widowed	Needs Improvement	2	2
Groundma	Female	45149	Hispanic	Married	Fully Meets	2	3

3). Calculate the average "Satisfaction Score" for male and female employees separately using a pivot table.

GENDER	SATISFACTION RATING
Female	2.99
Male	2.95
Grand Total	**2.97**

4). Create a chart to visualize the distribution of "Work- Life Balance Score" for different job functions
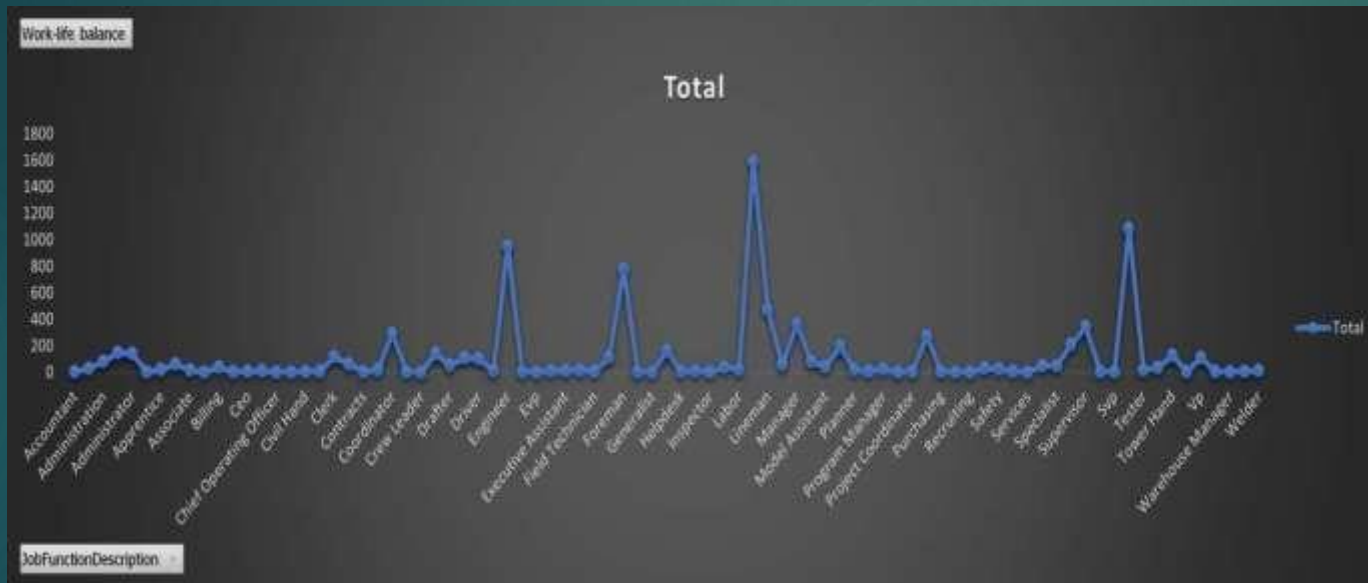
5).Filter the data to display only terminated employees and find out the most common "Termination Type."

The Most Common Termination Type is Resignation

6). Calculate the average "Engagement Score "for each department using a pivot table

Department	Average of Engagement Score
Admin Offices	2.93
Executive Office	3.38
IT/IS	3.03
Production	2.91
Sales	2.99
Software Engineering	2.97
Grand Total	2.94

7). Use VLOOKUP to find the supervisor's email address for a specific employee.

8). Can you identify the department with the highest average "Employee Rating?"

Department	Average of Current Employee Rating
Admin Offices	3.03
Executive Office	2.79
IT/IS	2.97
Production	2.98
Sales	2.91
Software Engineering	2.90
Grand Total	2.97

9). Create a scatter plot to explore the relationship between "Training Duration (Days)" and "Training Cost."

10). Build a pivot table that shows the count of employees by "RaceDesc" and "GenderCode."

Race Desc	Female	Male
Asian	346	283
Black	346	272
Hispanic	325	247
Other	318	264
White	347	252

11). Use INDEX and MATCH functions to find the "Training Program Name" for an employee with a specific ID.

Employee id	Training Program Name
1010	Communication Skills
1020	Technical Skills
1064	Leadership Development
1032	Technical Skills

12). Create a multi-level pivot table to analyze the "Performance Score" by "BusinessUnit" and "JobFunctionDescription."

Department	Performance -Score
BPC	303
CCDR	300
EW	302
MSC	296
NEL	304
PL	301
PYZ	299
SVG	304
TNS	297
WBL	294

13). Design a dynamic chart that allows users to select and visualize the performance of any employee over time.

14). Calculate the total training cost for each "Training Program Name" and display it in a bar chart.

15). Apply advanced conditional formatting to highlight the top 10% and bottom 10% of employees based on "Current Employee Rating."

16). Use a calculated field in a pivot table to determine the average "Engagement Score" per year

Year	Average of Engagement Score
2018	2.90
2019	3.07
2020	2.94
2021	2.89
2022	2.94
2023	2.83

17). Create a histogram to understand the distribution of "Exit Date" for terminated employees.
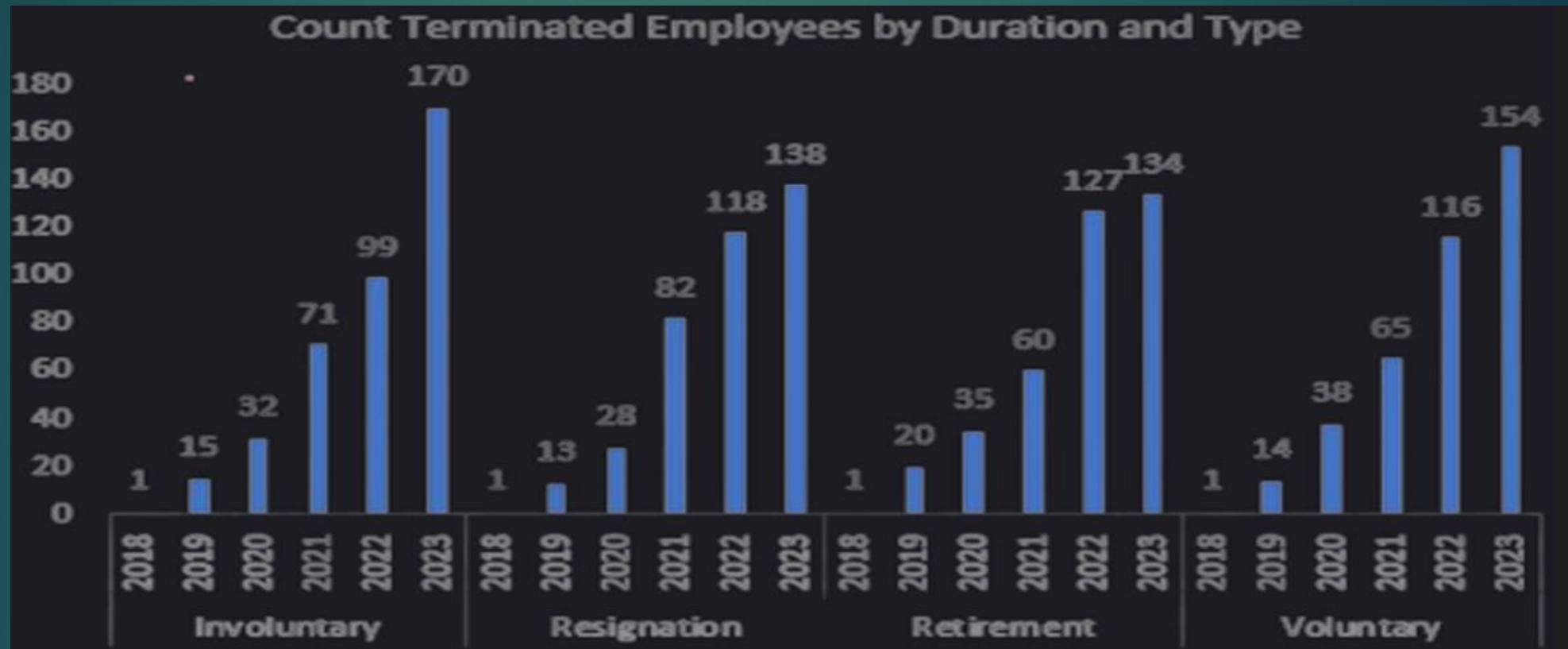
18). Utilize the SUMPRODUCT function to calculate the total training cost for employees in a specific location.

Location	Training Cost
Lake Kimfurt	332.25
Chadport	578.58
Toddtown	857.65
Powellland	436.98