

# Employee Data Analysis

**Psyliq Task 1**

Count of DepartmentType

## Termination Type

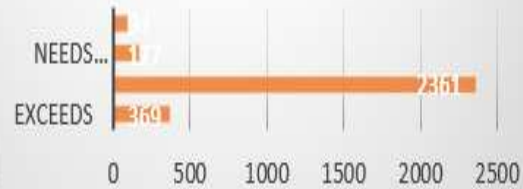


Status ▾

- Applied
- In Review
- Interviewing
- Offered

Count of Employee ID

## Performance Score by Employee Count



Performance Score ▾

	Exceeds	Fully Meets	Needs Improvement	PIP
Total	369	2361	177	93

Total

Count of Employee ID

## Marital Status



DepartmentType ▾

	Admin Offices	Executive Office	IT/IS	Production	Sales	Software Engineering
Total	80	24	430	2020	331	115

Total

Count of DepartmentType

## Employee Status

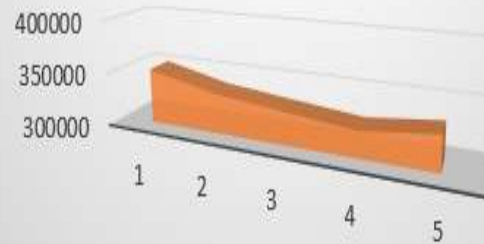


Total

	Applied	In Review	Interviewing	Offered	Rejected
Total	611	595	590	610	594

Status ▾

## Total No. of Training Days and Costing

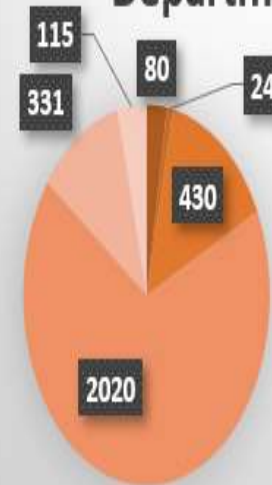


	1	2	3	4	5
Total	351564.82	337447.16	330620.33	324230.66	332023.12

Total

Count of Employee ID

## Department Type



DepartmentType ▾

- Admin Offices
- Executive Office
- IT/IS
- Production
- Sales

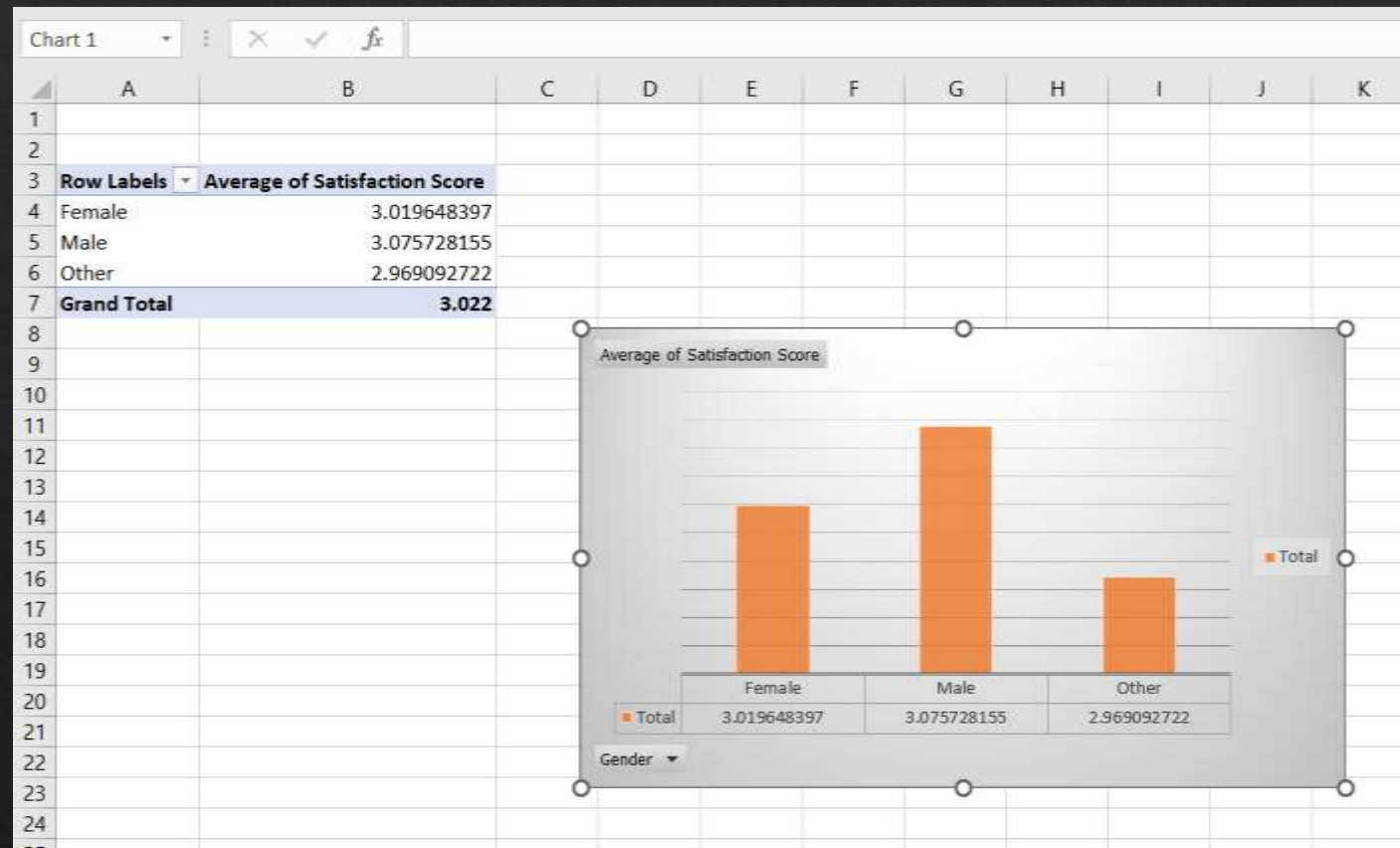
- ◆ Can you create a pivot table to summarize the total number of employees in each department?

Row Labels	Count of Employee ID
Admin Offices	80
Executive Office	24
IT/IS	430
Production	2020
Sales	331
Software Engineering	115
<b>Grand Total</b>	<b>3000</b>

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

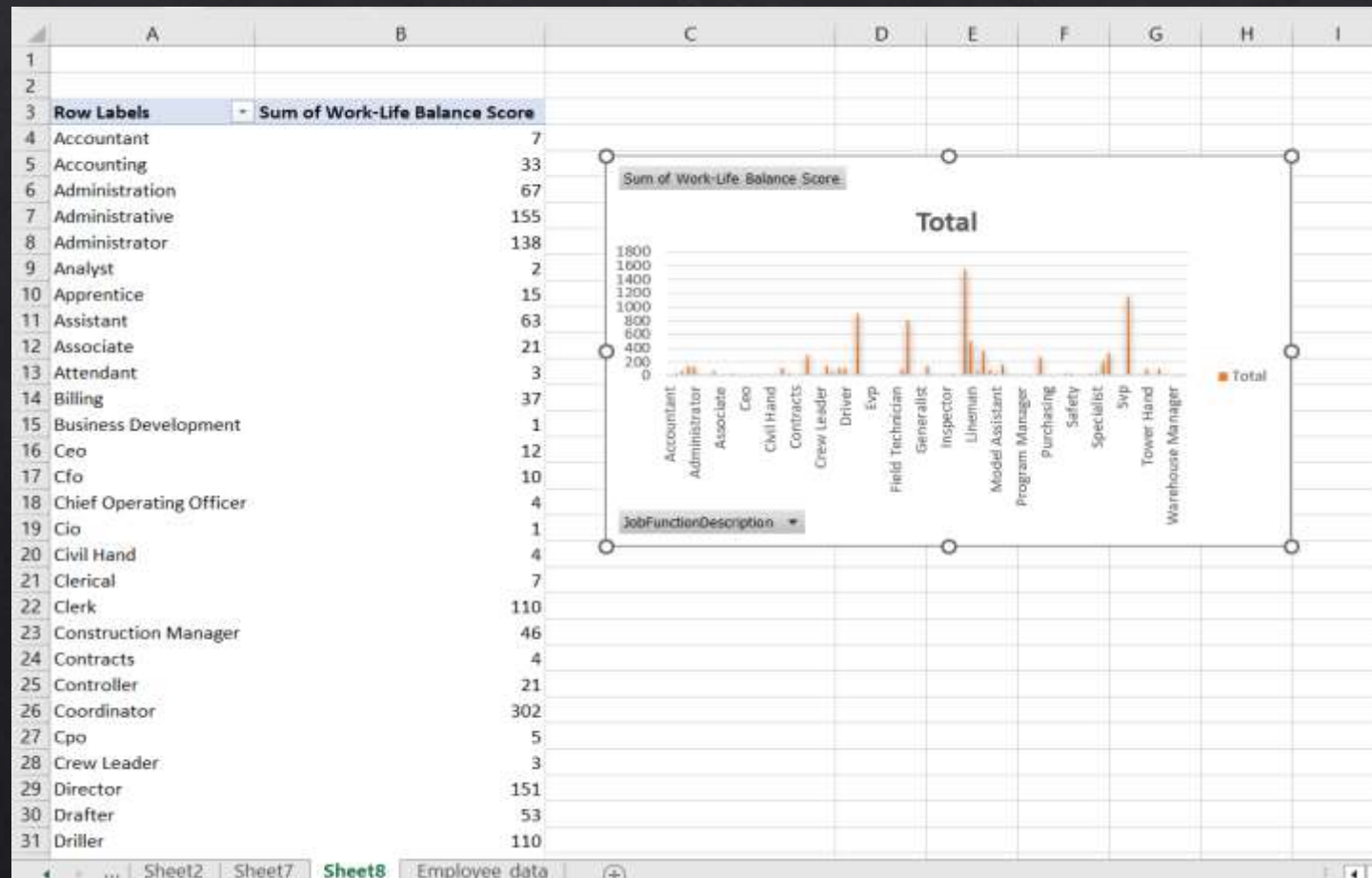
[illegible]

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





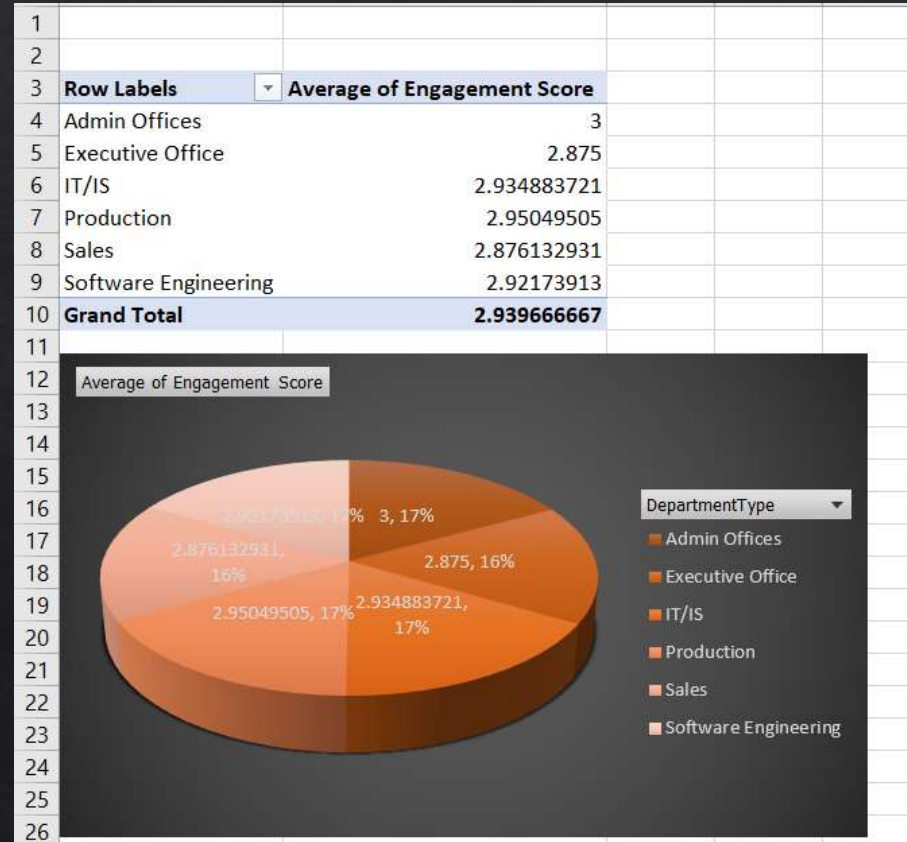
Create a chart to visualize the distribution of "Work-Life Balance Score" for different job functions



- ◇ . Filter the data to display only terminated employees and find out the most common "Termination Type."

Row Labels	Count of TerminationType
Involuntary	388
Resignation	380
Retirement	377
Unk	1467
Voluntary	388
Grand Total	3000

- ◇ Calculate the average "Engagement Score" for each department using a pivot table.



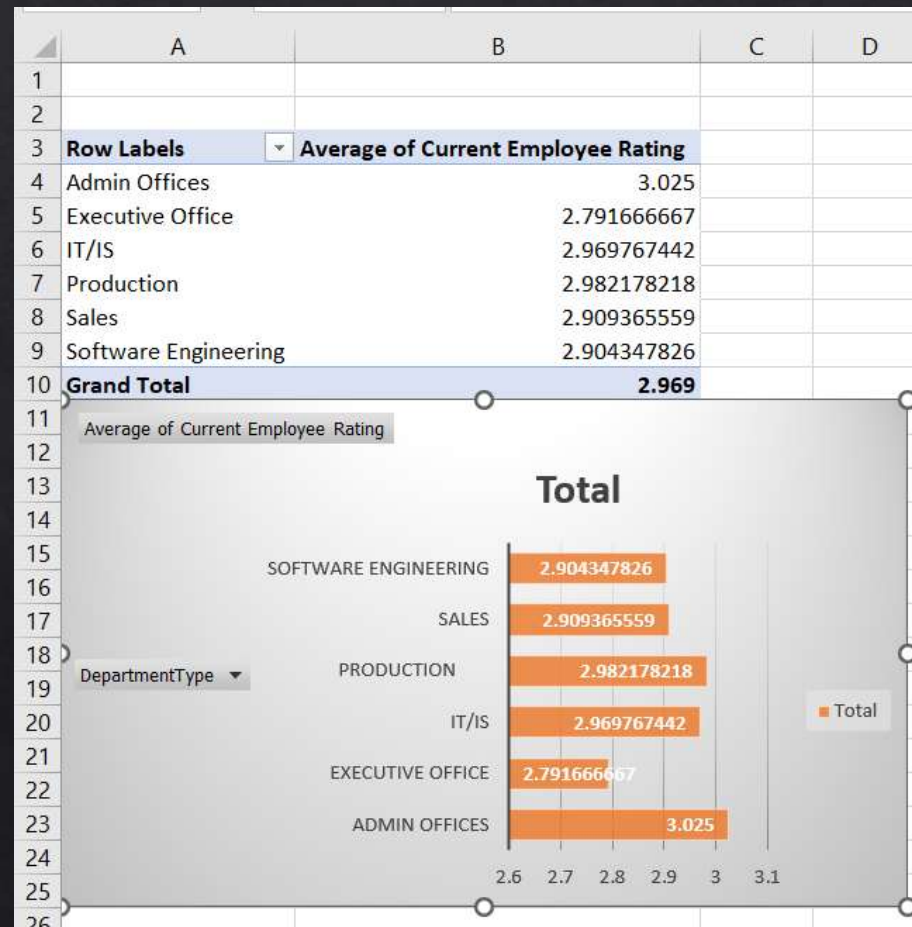


- ◆ Use VLOOKUP to find the supervisor's email address for a specific employee.

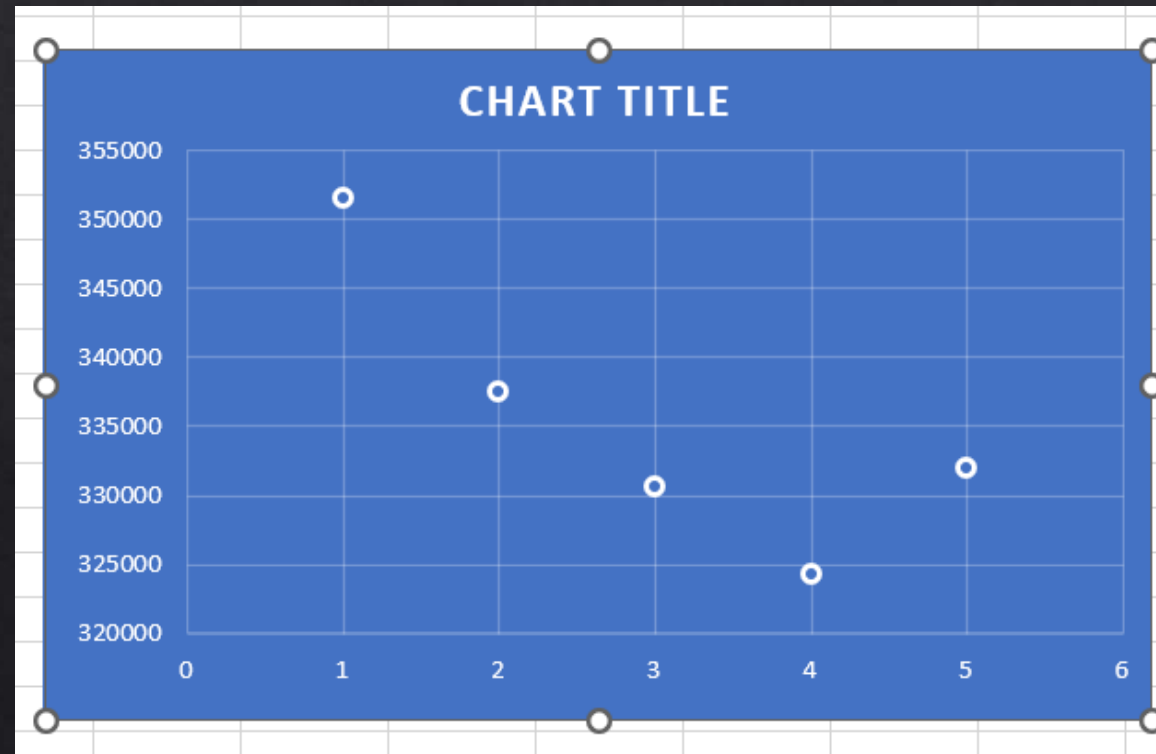
=VLOOKUP(A2,A2:H3001,8,)

	AC	AD
1		
2	uriah.bridges@bilearner.com	
3	paula.small@bilearner.com	
4	edward.buck@bilearner.com	
5	michael.riordan@bilearner.com	
6	jasmine.onque@bilearner.com	
7	maruk.fraval@bilearner.com	
8	latia.costa@bilearner.com	
9	sharlene.terry@bilearner.com	
10	jac.mckinzie@bilearner.com	
11	joseph.martins@bilearner.com	
12	myriam.givens@bilearner.com	
13	dheepa.nguyen@bilearner.com	
14	bartholemew.khemmich@bilearner.com	
15		

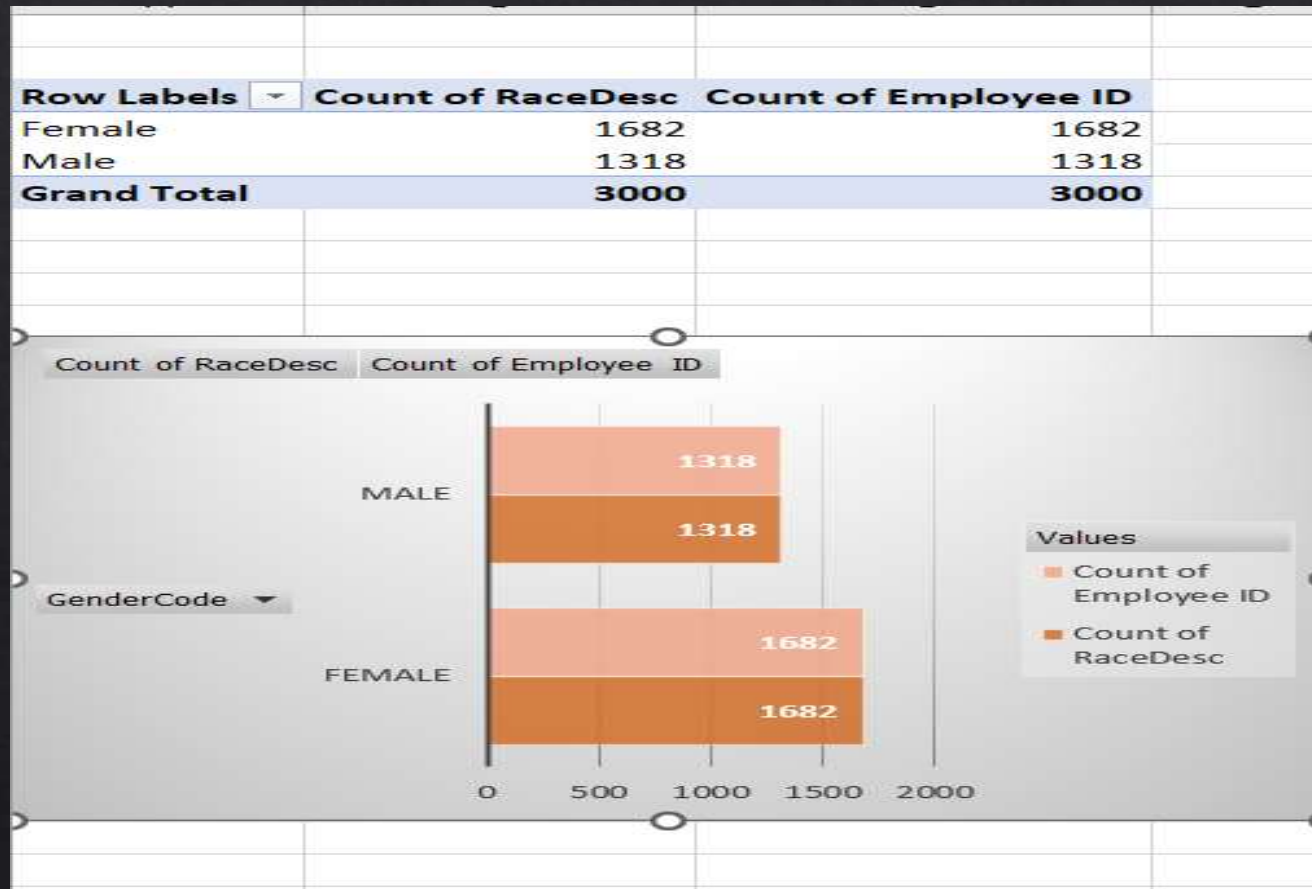
❖ Can you identify the department with the highest average "Employee Rating?"



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



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



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

✕ ✓ fx		=INDEX(C2:\$C\$3001,MATCH(A2,\$A\$2:\$A\$3001,0))					
	L	M	N	O	P	Q	R
	Training Program Name						
	Customer Service						
	Technical Skills						
	Communication Skills						
	Leadership Development						
	Customer Service						
	Communication Skills						
	Project Management						
	Leadership Development						
	Technical Skills						
	Project Management						
	Technical Skills						
	Project Management						
	Project Management						
	Communication Skills						
	Project Management						
	Communication Skills						
	Communication Skills						

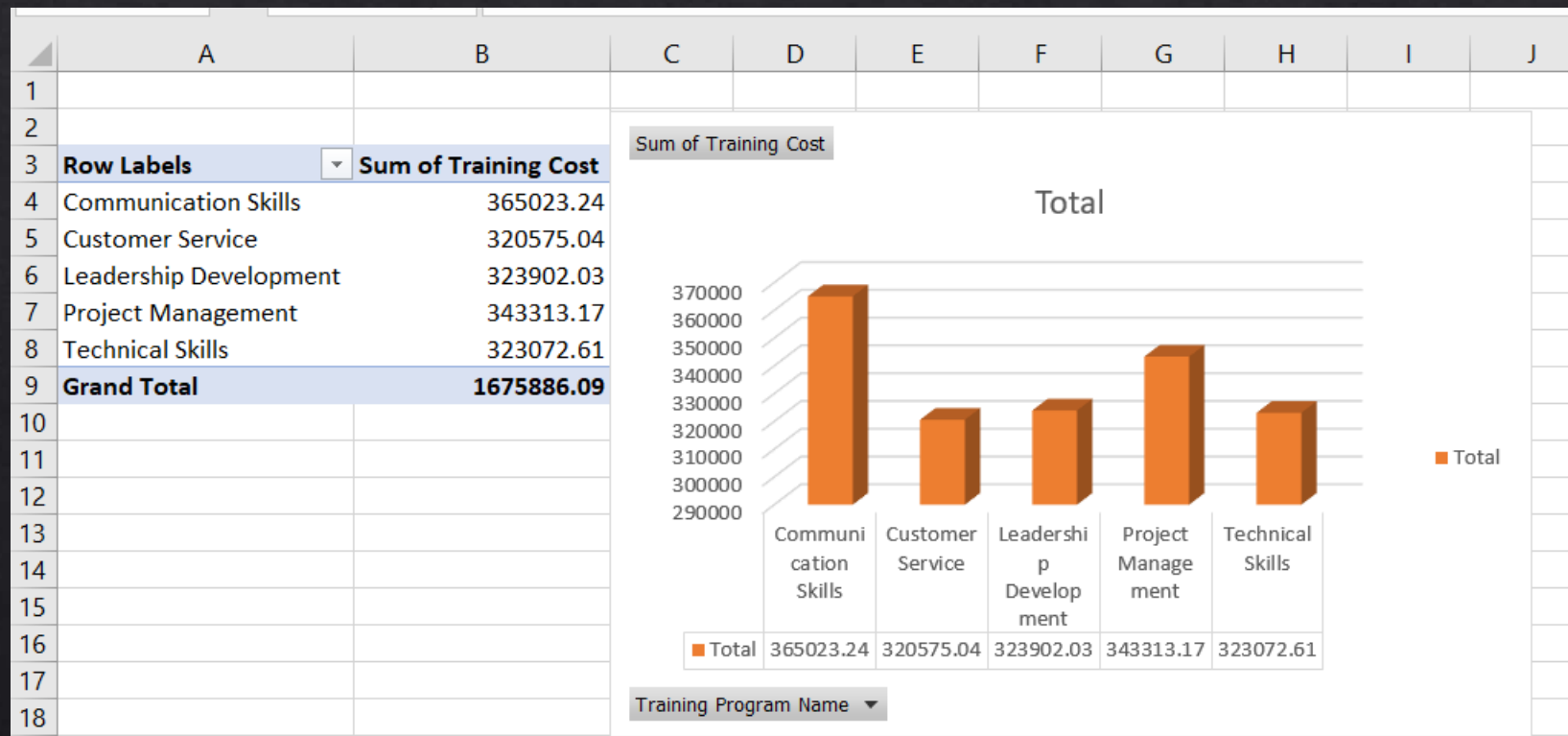


- ❖ Create a multi-level pivot table to analyze the "Performance Score" by "BusinessUnit" and "JobFunctionDescription."

[illegible]

- ◆ Design a dynamic chart that allows users to select and visualize the performance of any employee over time.
- ◆ Go to Developer Tab
- ◆ Click on “Visual Basic”
- ◆ Click on the new Module
- ◆ Type in macro Code
- ◆ Close VBA editor
- ◆ Execute macro by alt+f8 and select refresh pivot table.

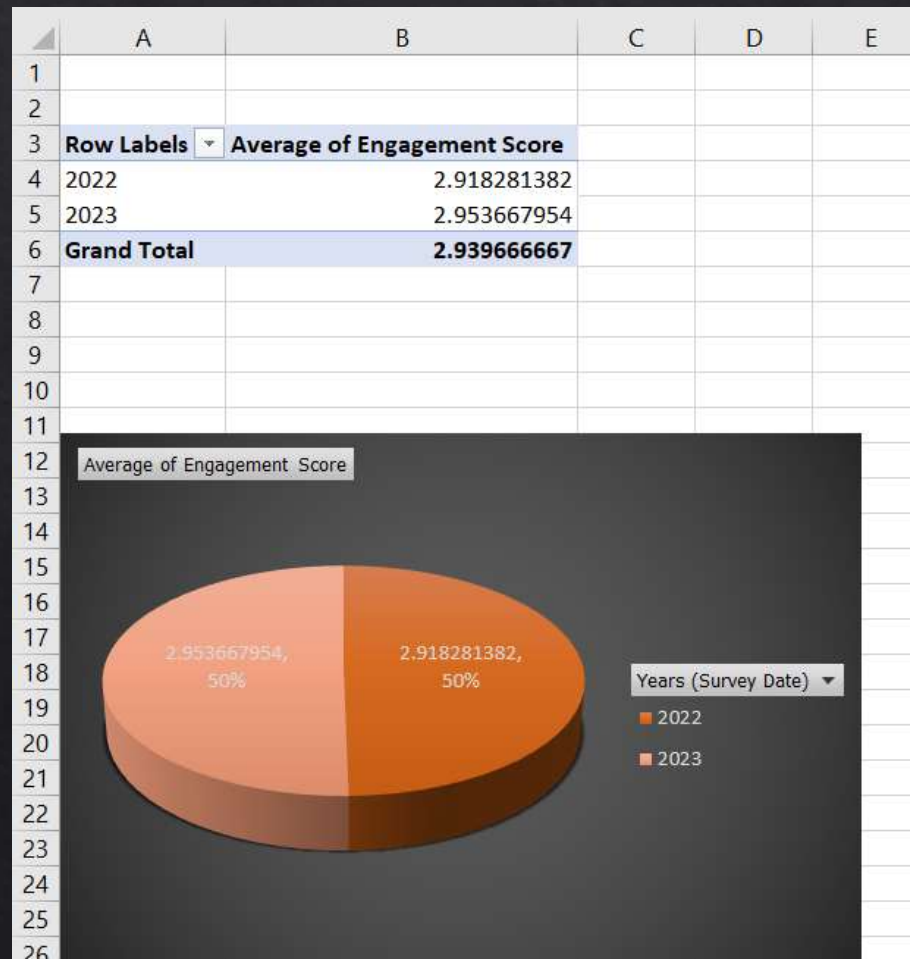
- ◆ Calculate the total training cost for each "Training Program Name" and display it in a bar chart.



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

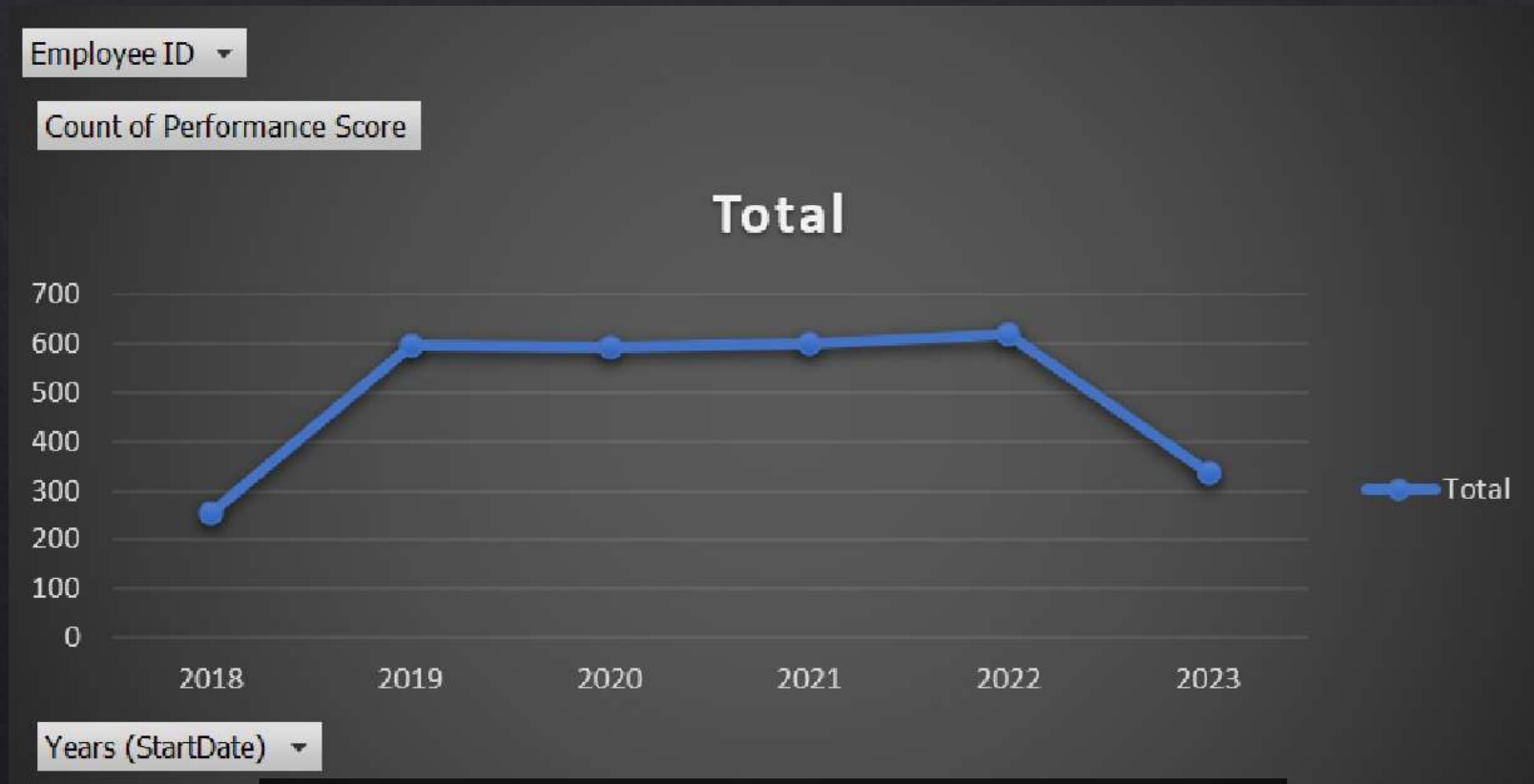
JobFunctionDescription	GenderCode	LocationCode	RaceDesc	MaritalDesc	Performance Score	Current Employee Rating
Accounting	Female	34904	White	Widowed	Fully Meets	4
Labor	Male	6593	Hispanic	Widowed	Fully Meets	3
Assistant	Male	2330	Hispanic	Widowed	Fully Meets	4
Clerk	Male	58782	Other	Single	Fully Meets	2
Laborer	Female	33174	Other	Married	Fully Meets	3
Driver	Male	6050	Black	Married	Fully Meets	3
Technician	Female	90007	Hispanic	Divorced	Exceeds	4
Engineer	Female	97756	White	Divorced	Fully Meets	2
Executive Assistant	Male	78789	Black	Widowed	Exceeds	3
Engineer	Male	78207	Asian	Widowed	Fully Meets	5
Technician	Female	46204	Other	Single	Fully Meets	5
Technician	Female	30428	Asian	Married	Fully Meets	3
Splicer	Male	80820	Other	Single	Fully Meets	3
Controller	Female	40220	White	Divorced	Fully Meets	3
Lineman	Male	89139	Asian	Widowed	Exceeds	4
Laborer	Male	2810	Black	Single	Exceeds	2
Coordinator	Male	2621	Asian	Widowed	Fully Meets	3
Director	Male	44553	Other	Widowed	Fully Meets	3
Supervisor	Female	5360	Other	Married	Exceeds	4
Driller	Female	16325	White	Divorced	Exceeds	2
Technician	Female	43481	Asian	Widowed	Fully Meets	3
Specialist	Male	50705	Asian	Widowed	Fully Meets	3
Technician	Male	5168	Black	Single	Fully Meets	5
Operator	Male	11765	Other	Single	Exceeds	2
Technician	Male	71071	Other	Divorced	Exceeds	3
Foreman	Male	12122	Black	Divorced	Fully Meets	2
Engineer	Male	87065	White	Widowed	Fully Meets	4
Foreman	Male	10415	Hispanic	Married	Needs Improvement	4
Manager	Male	3763	Other	Widowed	Exceeds	4
Technician	Female	79623	Black	Divorced	Fully Meets	3

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





- ◆ Can you build a macro that automates the process of updating and refreshing all pivot tables in the workbook?



- ◇ Create a histogram to understand the distribution of "ExitDate" for terminated employees.



- ❖ Utilize the SUMPRODUCT function to calculate the total training cost for employees in a specific location.

Employee ID	Training Date	Training Program Name	Training Type	Training Outcome	Location	Trainer	Training Duration(Days)	Training Cost
1001	21-Sep-22	Customer Service	Internal	Failed	Port Greg	Amanda D	4	510.83
1002	19-Jul-23	Leadership Development	Internal	Failed	Brandonvie	Brittany C	2	582.37
1003	24-Feb-23	Technical Skills	Internal	Incomplete	Port Brianni	Mark Rob	4	777.06
1004	12-Jan-23	Customer Service	Internal	Completed	Knightboros	Richard Fi	2	824.3
1005	12-May-23	Communication Skills	External	Passed	Bruceshire	Heather Sl	4	145.99
1006	08-May-23	Project Management	Internal	Failed	Erinfort	Michael D	2	838.07
1007	14-May-23	Leadership Development	External	Failed	New Christc	Virginia Cl	2	667.32
1008	02-Aug-23	Technical Skills	External	Incomplete	Lowemouth	Erica Max	2	758.18
1009	21-Aug-22	Customer Service	Internal	Incomplete	Johnland	Katelyn H	2	101.21
1010	19-Aug-22	Communication Skills	External	Incomplete	Lake Kimfur	Rhonda Cl	5	332.25
1011	06-Nov-22	Communication Skills	Internal	Completed	Smithshire	Natalie F	1	803.98
1012	28-Mar-23	Technical Skills	External	Failed	Howardburg	Theresa M	3	887.08
1013	08-Apr-23	Project Management	External	Incomplete	East Jessica	Michael M	2	657.85
1014	21-Feb-23	Customer Service	External	Incomplete	Watersview	Rachel Jor	2	895.49
1015	13-May-23	Leadership Development	External	Passed	Port Ninalar	Jennifer O	1	539
1016	30-Apr-23	Communication Skills	External	Completed	Lake Stuartl	Eric Johns	2	606.68
1017	14-Nov-22	Technical Skills	External	Passed	Coolleybury	Joseph Mc	3	265.73
1018	25-Mar-23	Project Management	Internal	Incomplete	Larsonboro	Whitney N	2	673.29
1019	26-Oct-22	Project Management	External	Passed	Powellland	Jon Garcia	5	436.98
1020	30-Dec-22	Technical Skills	External	Passed	Chadport	Nicole Tay	4	578.58
1021	10-Mar-23	Technical Skills	Internal	Failed	Patrickhave	Crystal Ne	1	647.16
1022	12-Jan-23	Project Management	Internal	Failed	Lindseyburg	Kevin Nich	1	664.23
1023	19-Oct-22	Project Management	Internal	Failed	West Justinl	Angela Go	4	893.07
1024	11-Oct-22	Project Management	External	Completed	Hullmouth	Keith Curt	5	868.98
1025	13-Jan-23	Project Management	Internal	Incomplete	Thompsonb	Nina Rodr	5	761.95
1026	17-Apr-23	Communication Skills	External	Incomplete	Cynthiach	Jennifer R	4	431.57
1027	16-Mar-23	Communication Skills	External	Incomplete	East Jacksta	Mr. Rober	4	357.57
1028	19-Jan-23	Technical Skills	Internal	Incomplete	East Christo	Gina Moo	3	804.06
1029	25-Feb-23	Project Management	Internal	Failed	Lake Antho	Christoph	5	729.41
1030	04-Jan-23	Communication Skills	Internal	Completed	Longton	Wendy Gil	1	169.46

- ◆ Develop a dashboard that provides an overview of key HR metrics, including headcount, performance, and training costs, using charts and pivot tables

