

# Project 4 - Hiring Process Analytics

## Project Description

As a data analyst at a multinational company like Google, I undertook a project to analyze the hiring process data. The goal was to derive meaningful insights from the hiring trends, including rejections, interviews, job types, and vacancies, to help improve the hiring strategies.

## Approach

My approach involved:

1. Handling missing data in the dataset
2. Consolidating relevant columns to simplify analysis
3. Detecting and addressing outliers.
4. Summarizing data through statistical measures and visualizations
5. Conducting specific analyses on gender distribution, salary trends, departmental staffing, and position tiers

## Tech-Stack Used

I primarily used Microsoft Excel for this project. This versatile tool allowed me to perform data cleaning, statistical analysis, and create various visualizations. Excel's built-in functions and charting capabilities were essential for efficiently processing the hiring data and presenting insights.

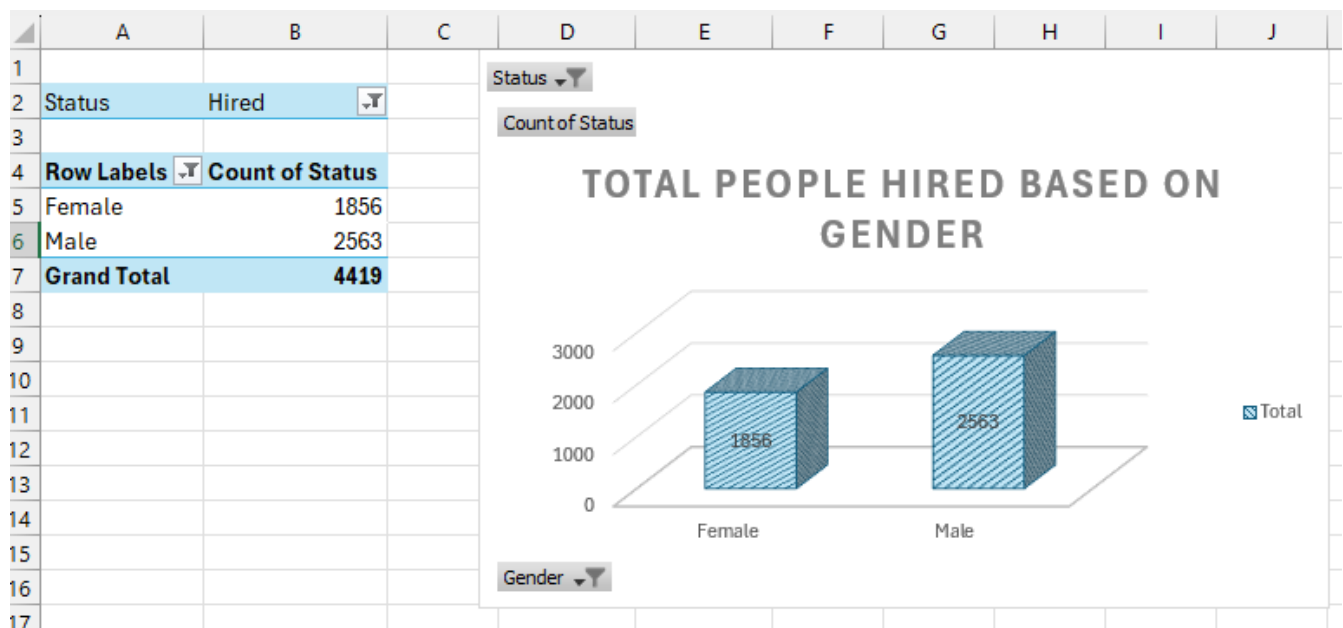
# Given Dataset

	A	B	C	D	E	F	G
1	application_id	Interview Taken on	Status	event_name	Department	Post Name	Offered Salary
2	430846	5/1/14 10:27	Hired	Male	Operations Department	c9	89058
4	245050	5/1/14 10:44	Hired	Male	Operations Department	c5	25888
6	892747	5/1/14 10:46	Hired	Female	Operations Department	c5	32605
7	695736	5/1/14 11:35	Hired	Female	Operations Department	i7	32616
8	659767	5/1/14 11:36	Hired	Male	Operations Department	i7	61362
9	383422	5/1/14 11:40	Hired	Male	Service Department	c8	56553
10	666314	5/1/14 11:40	Hired	Female	Operations Department	i7	92994
11	521853	5/1/14 11:43	Hired	Female	Operations Department	c9	68268
14	205184	5/1/14 12:05	Hired	Male	Service Department	c9	75053
15	89108	5/1/14 13:35	Hired	Don't want to say	Operations Department	c5	33139
16	824893	5/1/14 13:38	Hired	Male	Operations Department	c5	28134
17	763319	5/1/14 14:27	Hired	Male	Marketing Department	i5	70542
18	65925	5/1/14 14:57	Hired	Female	Sales Department	i7	40878
20	127139	5/1/14 15:42	Hired	Male	Sales Department	c8	42951
22	202821	5/1/14 16:01	Hired	Male	Operations Department	i6	52176
23	528833	5/1/14 16:02	Hired	Male	Service Department	c9	10343
24	154263	5/1/14 16:03	Hired	Male	Service Department	c9	66298
25	891568	5/1/14 16:28	Hired	Female	Operations Department	i7	3423
26	169603	5/1/14 16:39	Hired	Male	Operations Department	c9	75013
28	896164	5/1/14 17:21	Hired	Don't want to say	Production Department	i7	37947
29	86558	5/1/14 17:34	Hired	Male	Operations Department	i6	45622
33	916106	5/1/14 18:44	Hired	Female	Finance Department	c5	23057
34	120522	5/1/14 18:55	Hired	Female	Operations Department	c9	54630
36	867293	5/1/14 19:52	Hired	Male	Operations Department	c-10	19871
37	455195	5/1/14 22:04	Hired	Female	Service Department	c9	62141
38	816746	5/1/14 22:33	Hired	Don't want to say	Operations Department	c5	42846
39	513166	5/1/14 22:53	Hired	Female	Operations Department	i1	73579
45	778435	5/1/14 6:56	Hired	Female	Operations Department	c9	55524
46	505801	5/1/14 6:58	Hired	Female	Operations Department	i6	42169
47	160023	5/1/14 6:59	Hired	Female	Operations Department	c9	94328
48	211136	5/1/14 7:00	Hired	Female	Operations Department	i6	38217
49	591543	5/1/14 7:04	Hired	Male	Operations Department	c9	29216
50	289907	5/1/14 7:44	Hired	Male	Sales Department	-	85914
52	926938	5/1/14 7:50	Hired	Female	Service Department	c8	1042
53	458462	5/1/14 7:53	Hired	Female	Service Department	c8	32469
54	798839	5/1/14 7:56	Hired	Male	Human Resource Department	i1	46227

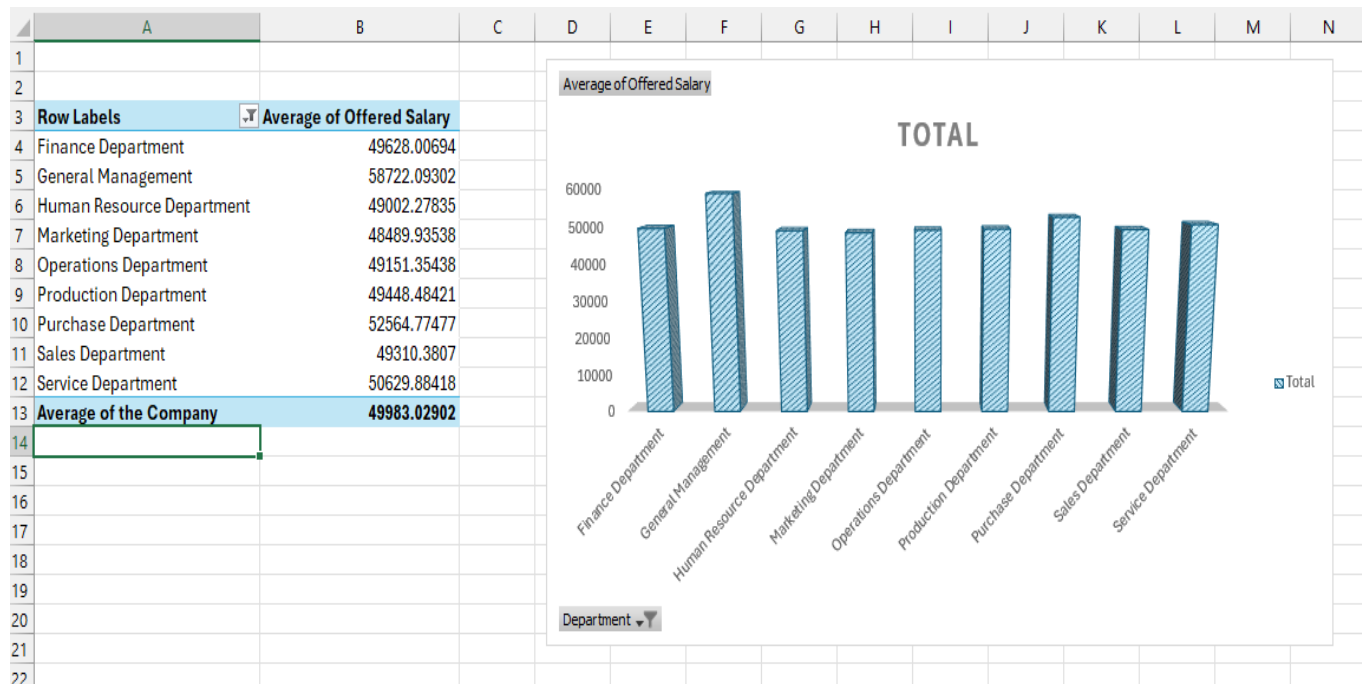
Link:

[https://docs.google.com/spreadsheets/d/1xlGpl\\_RUjyVdKzHmo8cMn-v\\_zh69kGUrHJiYof8S2Kc/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1xlGpl_RUjyVdKzHmo8cMn-v_zh69kGUrHJiYof8S2Kc/edit?usp=sharing)

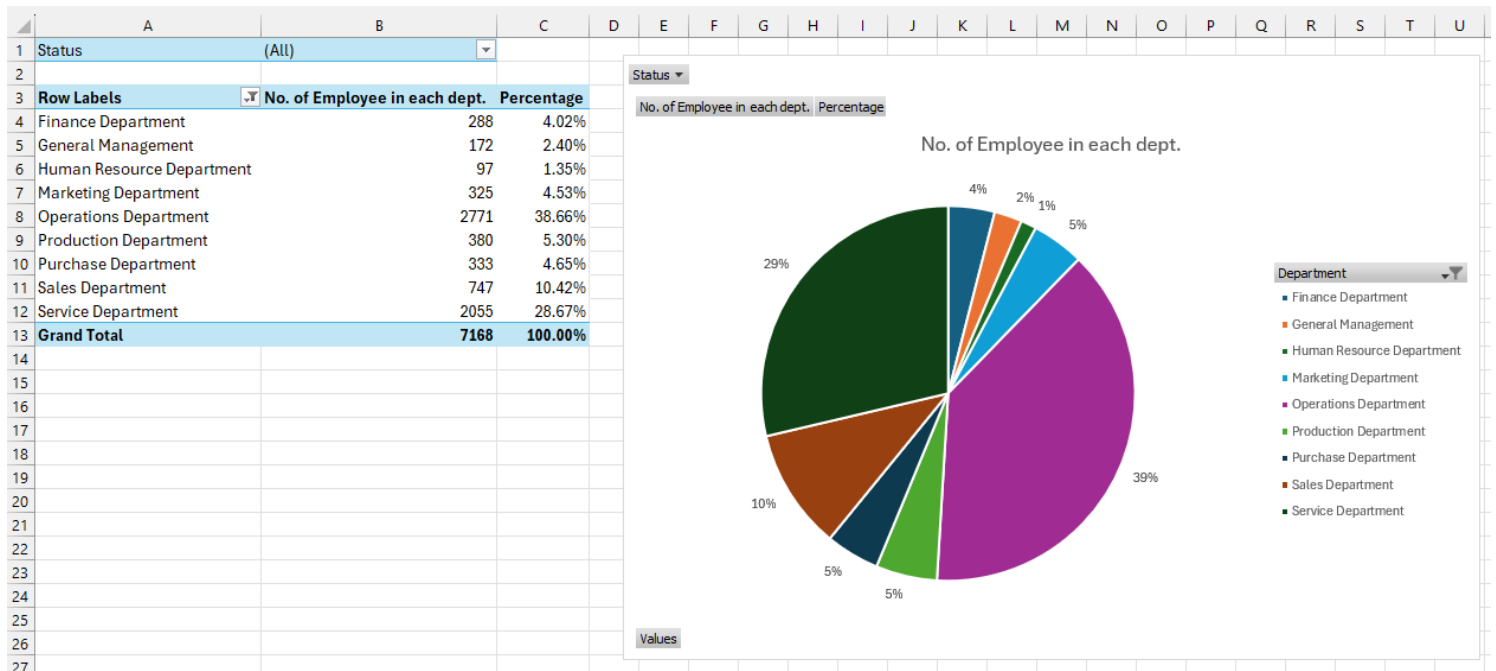
**Question 1:** Determine the gender distribution of hires. How many males and females have been hired by the company?



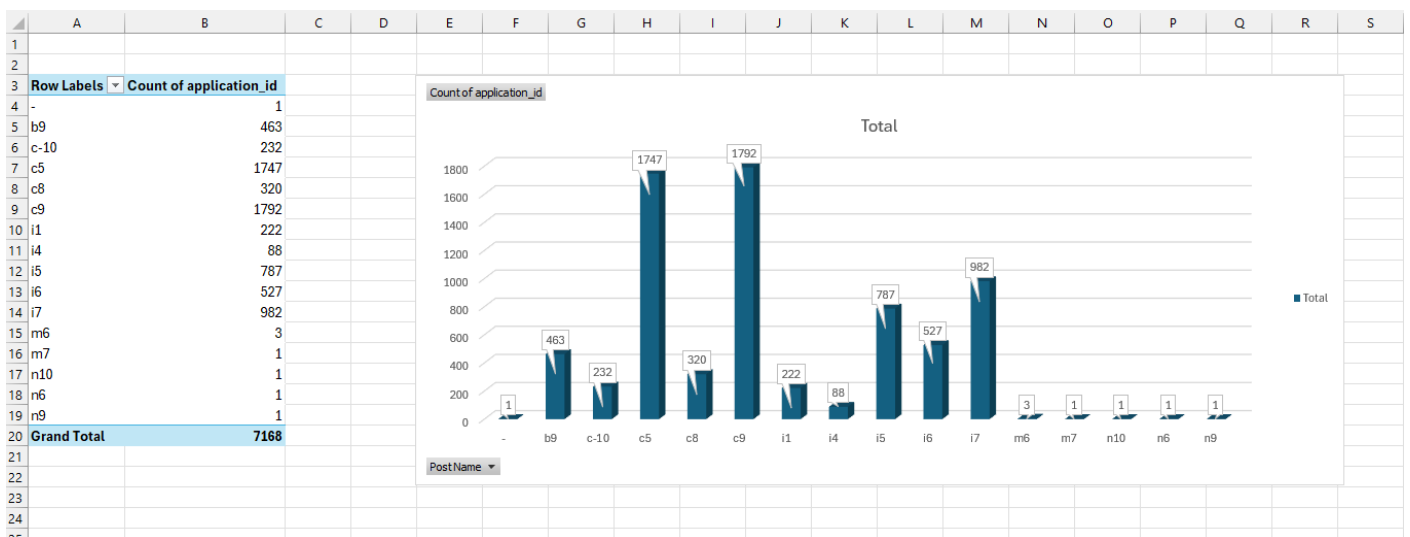
**Question 2:** What is the average salary offered by this company? Use Excel functions to calculate this.



**Question 3:** Use a pie chart, bar graph, or any other suitable visualization to show the proportion of people working in different departments.



Question 4: Use a chart or graph to represent the different position tiers within the company. This will help you understand the distribution of positions across different tiers.



## **Insights**

Key insights include:

- Identified gender distribution patterns in the hiring
- Calculated and analyzed the average salary offered by the company
- Created salary distribution classes to understand compensation structures
- Visualized the proportion of employees across different departments
- Mapped out the distribution of position tiers within the company

## **Result**

This project significantly enhanced my understanding of the hiring processes. By analyzing various aspects of the hiring data, I've been able to:

- Gain clarity on the workforce diversity in terms of gender
- Understand the salary competitiveness in the market
- Identify potential imbalances in departmental staffing
- Recognize the structure of the position tiers

These insights provide a data-driven foundation for improving the hiring strategies, addressing any imbalances, and making more informed decisions in future recruitment efforts. The project has equipped the HR and management teams with valuable information to optimize the hiring processes and workforce planning.