

RISHABH CHANDRASHEKHAR, JAGTAP  
GPA:3.7, University of Delaware

Question 1 [10 mins]

Med	Month_Year	Units
Med A	2012-07	4303700
Med A	2012-08	4477100
Med A	2012-09	849900
Med A	2012-11	75300
Med A	2012-12	10200

**GRAND TOTAL      MED A      9716200**

Med	Month_Year	Units
Med B	2012-09	535
Med B	2012-10	393
Med B	2012-11	420
Med B	2012-12	1

**GRAND TOTAL      MED B      1349**

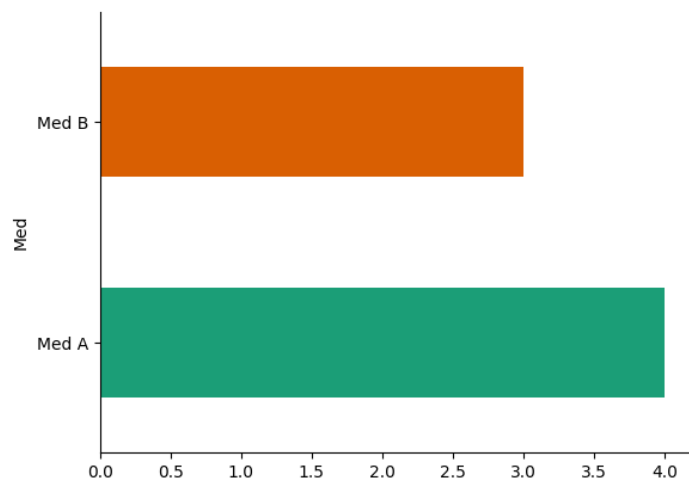
## Question 2 [20 mins]

Med	Months	Number of patients
Med A	2012-07	92
Med A	2012-08	92
Med A	2012-09	73
Med A	2012-11	4

**GRAND TOTAL      MED A                      261**

Med	Months	Number of patients
Med B	2012-09	76
Med B	2012-10	66
Med B	2012-11	72

**GRANDTOTAL      MED B                      214**



Question 3 [25 mins]

Med	Month_Year	Units	ID	Avg total monthly dose per patient
Med A	2012-07	4303700	92	46779
Med A	2012-08	4477100	92	48664
Med A	2012-09	849900	73	11642
Med A	2012-11	75300	4	18825

GRAND TOTAL

MED A

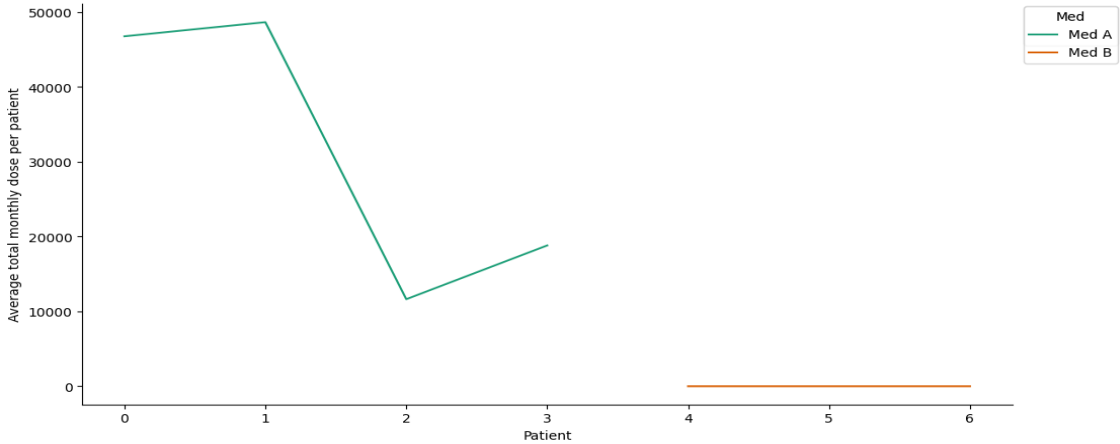
125911

Med	Month_Year	Units	ID	Average total monthly dose per patient
Med B	2012-09	535	76	7
Med B	2012-10	393	66	6
Med B	2012-11	420	72	6

GRAND TOTAL

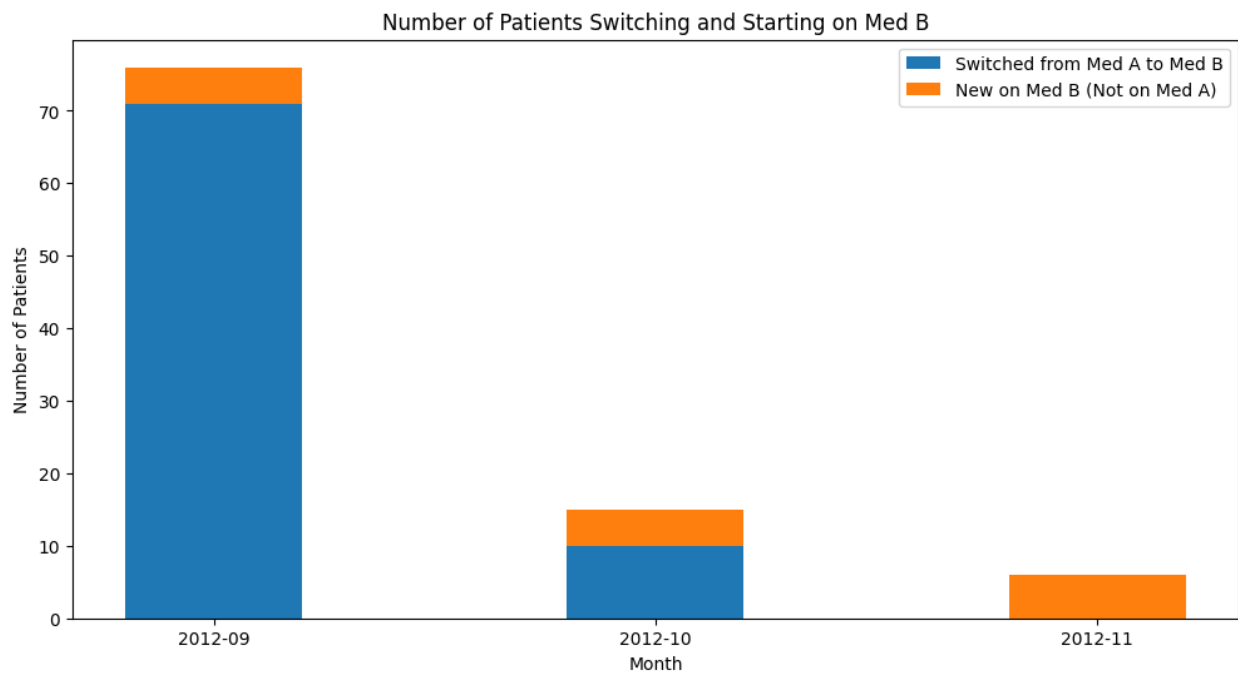
MED B

19



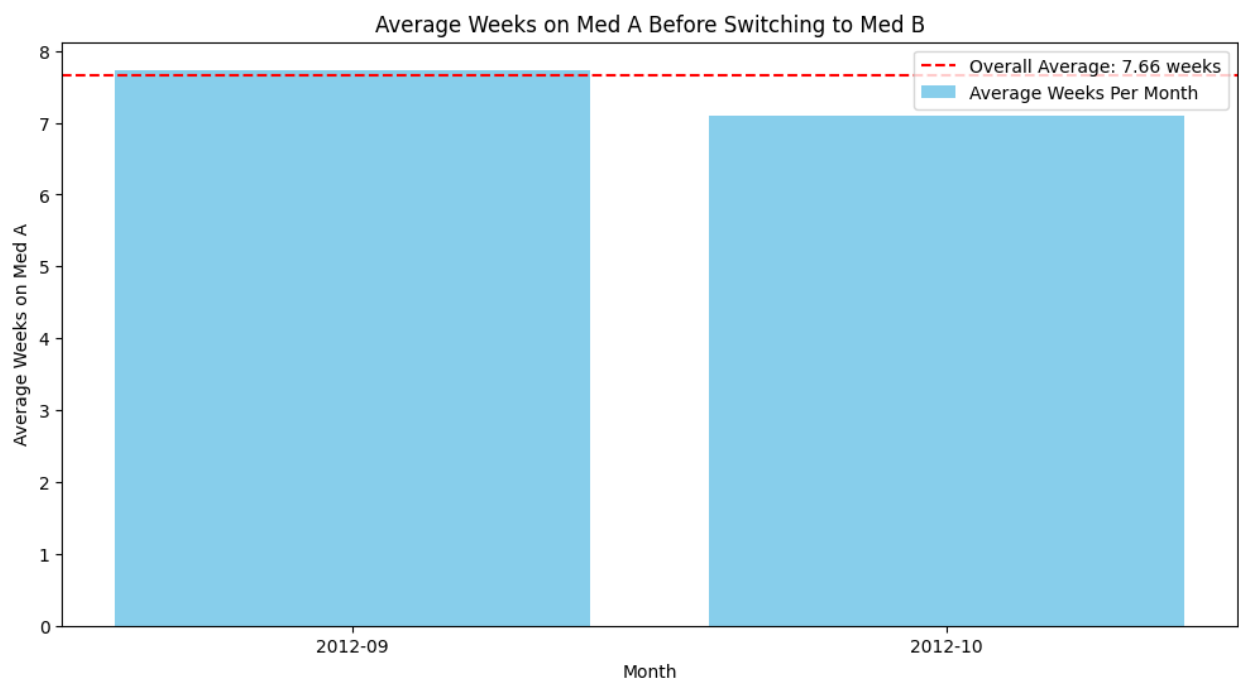
## Question 4 [120 mins]

Month	Number of Patients Switched	New Patients on Med B
2012-09	71	5
2012-10	10	5
2012-11	0	6
<b>Grand Total</b>	<b>81</b>	<b>16</b>



Question 5 [100 mins]

Month MED B	Weeks On Med A	Overall Average
2012-09	7.736419	7.657848
2012-10	7.1	7.657848
Grand Total	14.836419	15.315696

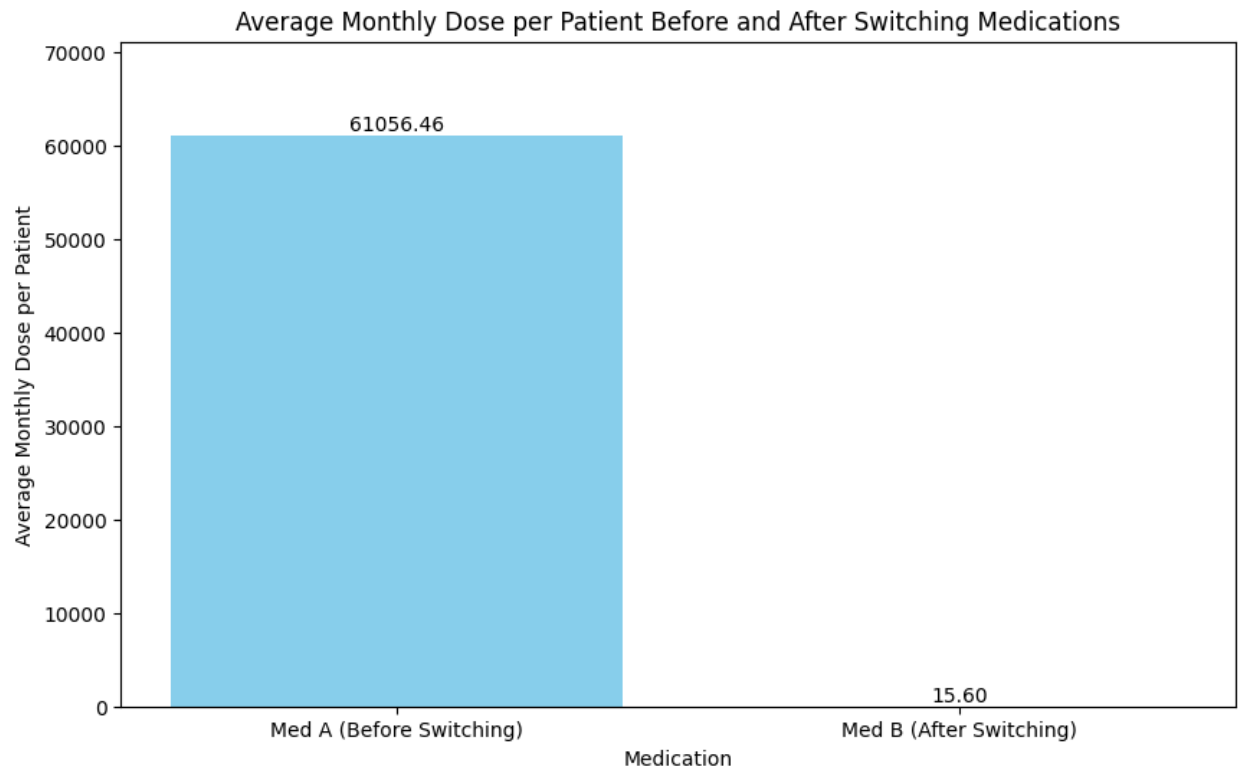


Overall Average Weeks on Med A Before Switching to Med B (Across All Three Months): 7.657

Question 6[150 mins]

Average Monthly Dose per Patient for Med A Before Switching: **61056.457**

Average Monthly Dose per Patient for Med B After Switching: **15.6**



## Question 7 [90 mins]

Breakeven Price per Unit of Med B: **\$46.68**

## Question 8 [110 mins]

Month	Average Monthly Dose of Med A
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September 61875.69525

October 55321.78774

November NO Patient is Switched

Average Monthly Dose of Med B	Average Total Monthly Dose
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16.92857143

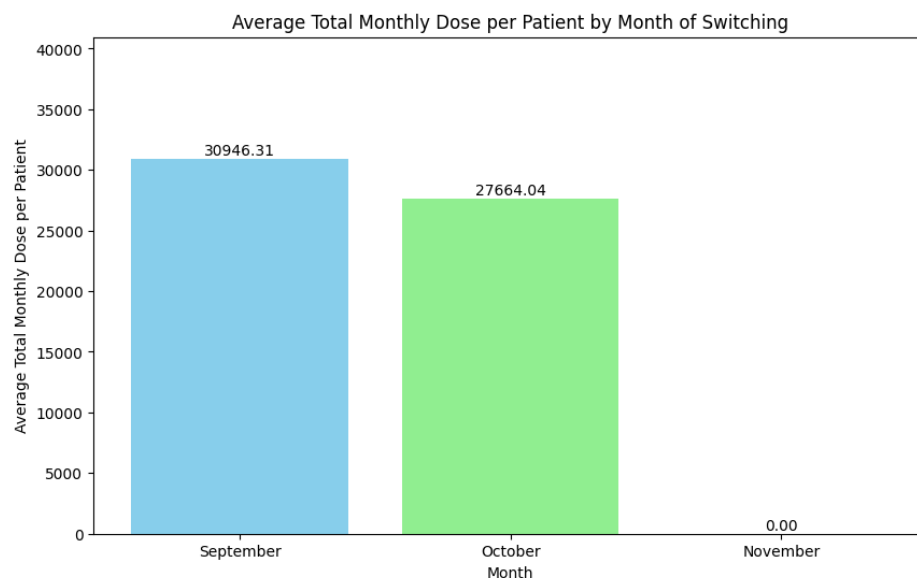
30946.31191

6.3

27664.04387

NO Patient is Switched

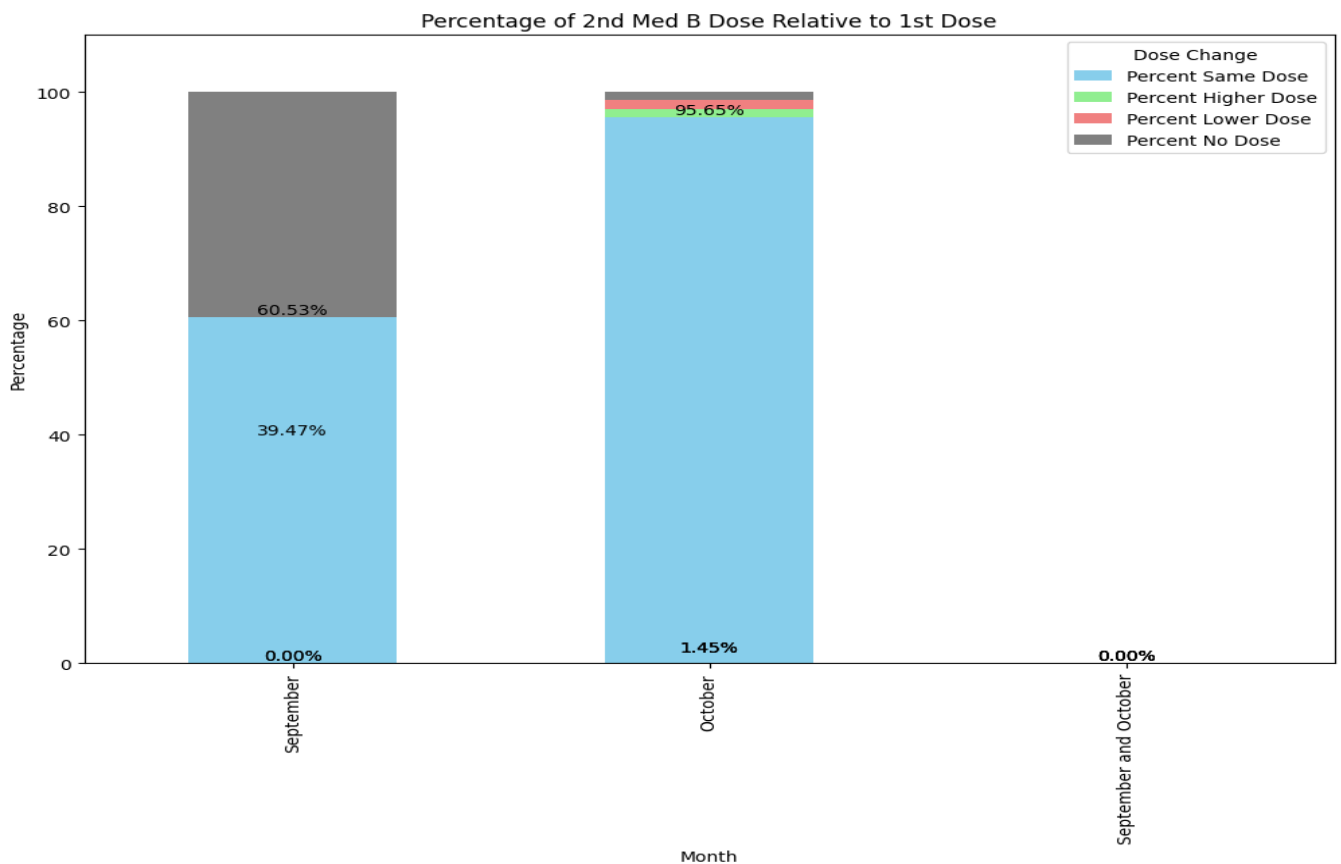
NO Patient is Switched



## Question 9[120 mins]

Month	Percent Same Dose	Percent Higher Dose
September	60.52631579	0
October	95.65217391	1.449275362
September and October	0	0

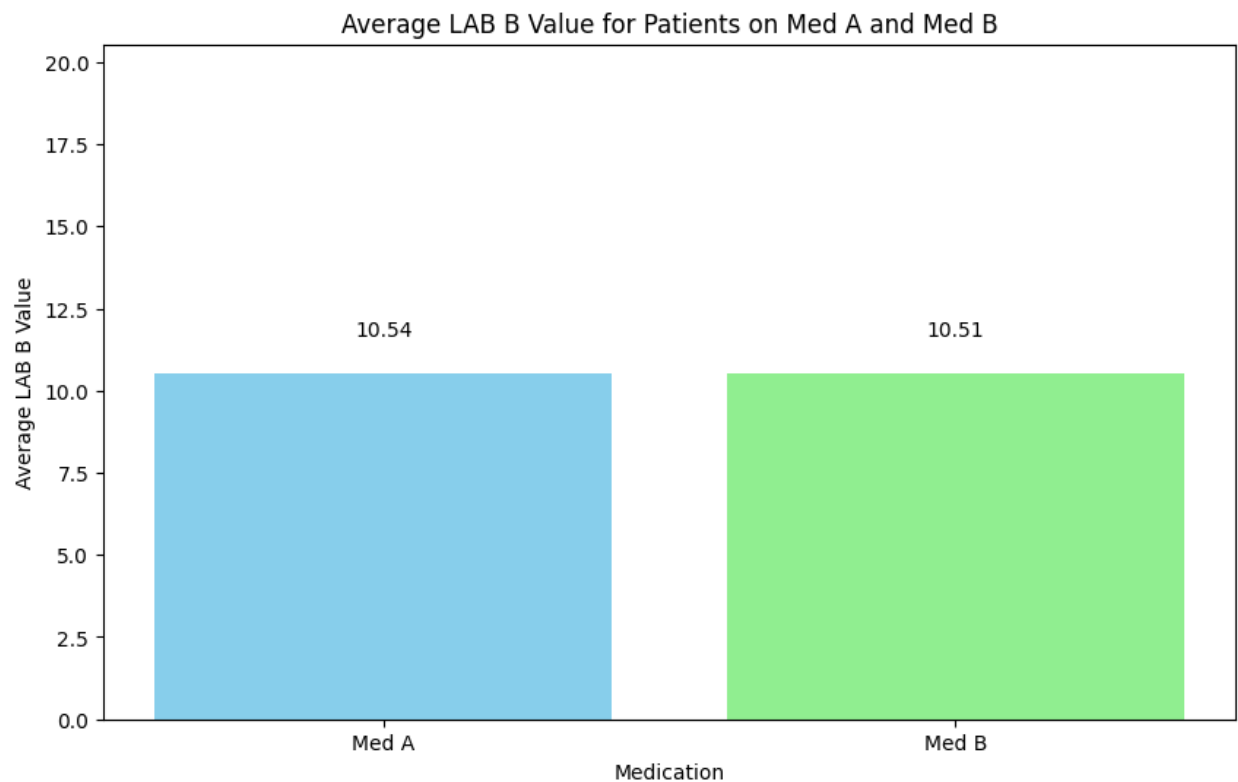
Percent Lower Dose	Percent No Dose
0	39.47368421
1.449275362	1.449275362
0	0





### Question 10 [50 mins]

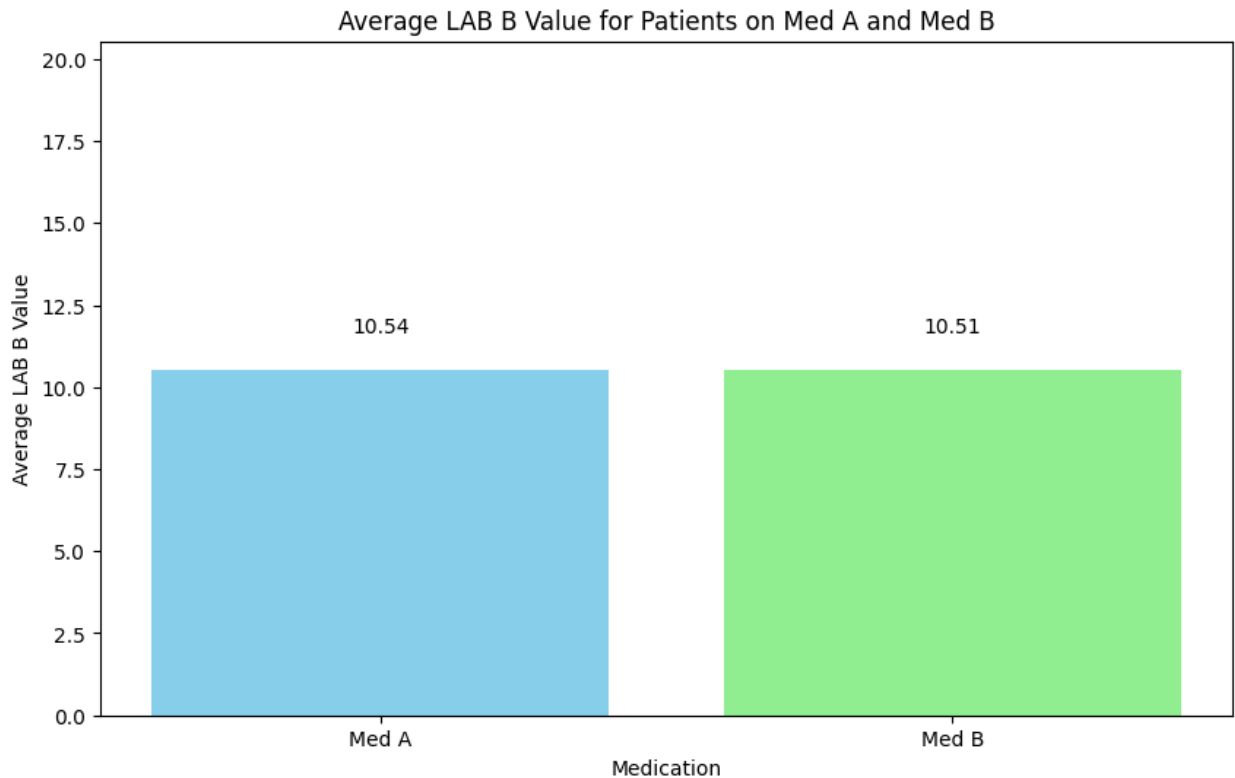
Medication	Average LAB B Value
Med A	10.54304813
Med B	10.51004785



Question 11 [40 mins]

Medication	Average Monthly Dose	Average LAB B Value
Med A	100	10.54304813
Med B	50	10.51004785

Original Breakeven Price per Unit of Med B	Adjustment Factor
0.02	
0.02	0.9968



# RISHABH JAGTAP

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## OBJECTIVE

Motivated data analyst professional with expertise in developing performance metrics dashboards and leading ETL processes. Adept at leveraging data-driven insights to drive strategic decision-making and propose innovative solutions tailored to business needs.

## SKILLS

Data Visualization: Tableau, R Studio, Python, MS Excel | Programming and Scripting: SQL, Python, R | ScrumMaster

## PROFESSIONAL EXPERIENCE

### University of Delaware

Newark, DE

*Technical Support Engineer – Graduate Student*

August 2023 – Present

- Continuously resolved hardware, software, and network issues, achieving a sustained 20% reduction in downtime for labs.
- Orchestrated the successful management of an 8-member IT team, tackling complex challenges head-on, resulting in a remarkable 15% ongoing improvement in overall system performance.
- Led user training sessions, achieving a 30% drop-in simple support requests, empowering independent issue resolution, and maintaining a knowledge base for an ongoing 25% reduction in recurring issues.

### Shree Multimedia

*Software Developer Internship*

August 2020 – May 2021

- Conducted comprehensive analysis of industry benchmarks, facilitating seamless integration of a real-time biometric authentication fingerprint scanner; reduced authentication time by 50%, enhancing user experience and security.
- Led development of a cloud-based web app for biometric authentication and inventory tracking, achieving 30% data accuracy improvement and 20% fewer tracking errors using skills from technical courses.

### Manshya Marketing Pvt.Ltd.

*Application Developer Internship*

August 2019 – May 2020

- Redesigned and optimized the company's e-commerce website using React and REST API improving performance and developing reusable UI components following best practices.
- Contributed to building a sales analytics dashboard, increasing sales by 15% using Kotlin- based application development.

### Tech Smart Systems

*Data Science Project Internship*

March 2019 – July 2019

- Industrial Production Forecasting Internship Project used Python, Hadoop and Informatica, to develop prediction model.
- Developed a forecasting model using ARIMA and SARIMA to predict production for 2 years, achieving 90% accuracy.
- Performed exploratory data analysis, data cleaning, and decomposition using stats models to identify trends.

## EDUCATION

UNIVERSITY OF DELAWARE

May,2024

**Master of Science, Management Information Systems and Business Analytics**

GPA: 3.7

UNIVERSITY OF PUNE

May,2022

**Bachelor of Engineering: Electronics and Telecommunication**

GPA: 3.7

## COURSE PROJECTS

Analyzing and Visualizing Data with Python using airline databases

- Developed multiple graph types using Jupyter Notebooks, Matplotlib, Seaborn, and Plotnine (ggplot) to forecast seasonal flight ticket sales based on an airline database (Snowflake), enhancing data visualization and predictive analytics.

BCG Strategy Consulting Virtual Experience Program

- Led a virtual experience program involving market research and data analysis. Reduced project delivery time by 20% through strategic recommendations driven by data insights.

Database Design & Normalization for Company Merger

- Spearheaded the design and normalization of post-merger data sets utilizing SQL, augmenting efficiency and curtailing query response time through proficient database design, exhibiting expertise in data architecture and data modeling.
- Normalized data served as a resource for generating insightful charts for merger analysis leveraging Tableau.

Data Visualization & Analysis for Resale Car Dealer

- Improved data accuracy by 20% through Alteryx-driven data cleaning and created impactful dashboards using Qlik Sense.

Inventory System Optimization

- Applied EOQ and Quantity Discount Models, reducing inventory costs while maintaining service levels. Calculated optimal order quantities and reorder points, optimizing inventory management.

Optimization and Decision-Making Models for Business Applications

- Developed Excel-based models for project selection and resource allocation, implementing linear programming, sensitivity analysis, and ROI calculations using Excel Solver and Solver Table.
- Enhanced models to handle fractional project participation and budget variations, maximizing NPV with constraints.