Six-Month Roadmap for MAS Student

MONTH 1:

Week 1:

Focused Topics and Expectations

1. **SQL (30%-40%)**
    - **Focus on learning the fundamentals of SQL, including data manipulation (SELECT, INSERT, UPDATE, DELETE) and data definition (CREATE, ALTER, DROP).**
    - **Aim to cover advanced topics like joins, subqueries, and indexes.**
    - **Ensure you understand how to optimize queries and manage databases effectively.**
2. **Quant (5%-10%)**
    - **Speed Math: Practice techniques to improve calculation speed, such as mental math tricks and shortcut methods for arithmetic operations.**
    - **Percentage: Master concepts related to percentages, including percentage change, percentage of a quantity, and applications in various problem-solving scenarios.**

Performance Targets:

- **Weekly Test Score: Aim to achieve a score higher than the average mark of 53.**
- **Sectional Test Marks: Strive to score around or above 70 marks in sectional tests.**
- **Expected Total Marks: Your total score across all tests should exceed 153 out of 200.**

Course Completion Guidelines:

- **SQL Course:**
    - **If you have completed more than 30% of the SQL course, your progress is satisfactory. Continue studying to deepen your understanding.**
    - **If less than 30% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**
- **Quant Course:**
    - **If you have completed more than 5% of the Quant course, your progress is on track. Keep practicing to solidify your skills.**
    - **If less than 5% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.**

Revision and Practice:

- **If your average total marks fall below 153 out of 200, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**
- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 2:

Focused Topics and Expectations

1. **SQL (30%-60%)**
    - **Expand your knowledge of SQL, covering advanced data manipulation and data definition techniques.**
    - **Study complex queries, including nested subqueries, common table expressions (CTEs), and window functions.**
    - **Learn about database transactions, concurrency control, and data integrity.**
2. **Quant (10%-15%)**
    - **Profit and Loss: Understand the concepts of cost price, selling price, profit percentage, and loss percentage. Practice problems involving discounts, markups, and break-even points.**
    - **Simple and Compound Interest(Basics): Master the formulas for simple and compound interest. Solve problems related to interest calculations over different time periods and scenarios involving principal amounts and rates of interest.**

Performance Targets:

- **Weekly Test Score: Aim to achieve a score higher than the average mark of 51.**
- **Profit and Loss Sectional Test Marks: Strive to score around or above 38 marks in sectional tests.**
- **Expected Total Marks: Your total score across all tests should exceed 90 out of 200.**

Course Completion Guidelines:

- **SQL Course:**
    - **If you have completed more than 50% of the SQL course, your progress is satisfactory. Continue studying to deepen your understanding.**
    - **If less than 50% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

- **Quant Course:**
    - **If you have completed more than 15% of the Quant course, your progress is on track. Keep practicing to solidify your skills.**
    - **If less than 15% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.**

Revision and Practice:

- **If your average total marks fall below 90 out of 200, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**
- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 3:

Focused Topics and Expectations

1. **SQL (>90%)**
    - **Aim to complete more than 90% of the SQL course. This includes mastering advanced SQL topics, complex queries, database optimization, and management techniques.**
    - **Focus on real-world applications and case studies to solidify your understanding.**
2. **Quant (Near 20%)**
    - **Continue practicing Profit and Loss and Simple and Compound Interest. Ensure you can solve various problem types with confidence and accuracy.**

Performance Targets:

- **Weekly Test Score: Aim to achieve a score higher than the average mark of 35.**
- **Sectional Test Marks: Strive to score above the average marks.**
- **Expected Total Marks: Your total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.**

Course Completion Guidelines:

- **SQL Course:**
    - **If you have completed more than 90% of the SQL course, your progress is satisfactory. Continue to refine and apply your knowledge.**
    - **If less than 90% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**
- **Quant Course:**

    - **If you have completed more than 15% of the Quant course, your progress is on track. Keep practicing to solidify your skills.**
    - **If less than 15% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.**

Revision and Practice:

- **If your average total marks fall below the sum of the averages of Weekly and Sectional Tests, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**
- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 4:

Focused Topics and Expectations

1. **Python (20%-25%)**
    - **Aim to cover 20%-25% of the Python course content.**
    - **Focus on covering the basics of Python, including syntax, data types, control structures, functions, and modules.**

Performance Targets:

- **Weekly Test Score: Aim to achieve a score higher than the average marks.**
- **Sectional Test: There is no sectional test this week. Instead, focus on revising previous topics and attending Communication Enhancement Sessions.**
- **Expected Total Marks: Your total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.**

Course Completion Guidelines:

- **Python Course:**
    - **If you have completed more than 20% of the Python course, your progress is satisfactory. Continue studying to deepen your understanding.**
    - **If less than 20% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks fall below the sum of the averages of Weekly Tests, take time to review and practice the topics you've learned. This includes revisiting**

difficult concepts and working on additional practice problems to reinforce your understanding.

- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

1st Month Overall Expectations and Remarks

1. **SQL:**
    - **Expectation: Complete 90% or more of the SQL course.**
    - **If Achieved: Excellent progress in SQL. You have a strong grasp of database concepts and query execution.**
    - **If Not Achieved: You need to catch up on the SQL course to meet the expectations. Focus on completing the remaining topics to build a solid foundation.**
2. **Quantitative Aptitude:**
    - **Expectation: Complete approximately 20% of the Quant course.**
    - **If Achieved: Good understanding of Quant concepts like Profit and Loss, and Interest calculations. Keep practicing to solidify these skills.**
    - **If Not Achieved: You need to increase your efforts in Quant. Focus on completing the necessary topics to meet the required percentage.**
3. **Python Programming:**
    - **Expectation: Complete 20%-25% of the Python course.**
    - **If Achieved: Well done on covering the basics of Python. You are ready to dive deeper into advanced topics.**
    - **If Not Achieved: You need to allocate more time to Python. Ensure you cover the required percentage to keep up with the course demands.**
4. **Overall Performance:**
    - **Expectation: Weekly test scores above the average marks (e.g., >51, >35). Sectional test marks exceeding the average for each section. Total marks greater than the sum of the averages of Weekly and Sectional Tests.**
    - **If Achieved: Consistent performance in tests indicates a strong understanding of the material. Keep up the good work and continue to aim for higher scores.**
    - **If Not Achieved: You need to improve your test scores. Focus on revising the topics where you are struggling and practice more to enhance your performance.**
5. **Revision and Practice:**
    - **Expectation: Regular review and practice to reinforce learning and address gaps. Active participation in communication enhancement sessions.**
    - **If Achieved: Your dedication to revision and practice is commendable. Regular participation in communication sessions will enhance your collaborative and interpersonal skills.**

- **If Not Achieved: You need to be more consistent with your revision and practice. Attend the communication enhancement sessions regularly to improve your overall learning experience.**

MONTH 2:

Week 1:

Focused Topics and Expectations

1. **Python (50%-60%)**
   - **Focus on advancing through the Python course, aiming to complete 50%-60% of the material. This should include deeper dives into Functions, Modules,and OOPs.**
   - **Ensure a solid understanding of topics covered so far, with emphasis on practice and real-world applications.**

Performance Targets:

- **Weekly Test Score: Attempt the weekly test focused on Python and aim to score higher than the average marks.**
- **Sectional Test: There is no sectional test this week. Use this time to revise previous topics and attend Communication Enhancement Sessions.**

Course Completion Guidelines:

- **Python Course:**
  - **If you have completed more than 50% of the Python course, your progress is satisfactory. Continue to build on this foundation.**
  - **If less than 50% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**

- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 2:

Focused Topics and Expectations

1. **Python (>90%)**
    - **Aim to complete more than 90% of the Python course, including mastering data structures (Array Linked Lists, Binary Trees etc.) and solving coding questions from different websites.**
    - **Ensure a comprehensive understanding of advanced concepts and practical applications.**

Performance Targets:

- **Weekly Test: The test is based on SQL, so revise SQL topics thoroughly before the test. Attempt the Python-based weekly test and aim to score higher than the average marks.**
- **Sectional Test: There is no sectional test this week. Use this time to revise previous topics and attend Group Discussion Sessions.**

Course Completion Guidelines:

- **Python Course:**
    - **If you have completed more than 90% of the Python course, including data structures and coding questions, your progress is excellent. Continue to build on this foundation.**
    - **If less than 90% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**
- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 3:

Focused Topics and Expectations

1. **Statistics (45%-50%)**
    - **Aim to complete 45%-50% of the Statistics course, ensuring a solid understanding of fundamental statistics concepts, descriptive Stats(Outliers and Variability) and distributions.**

Performance Targets:

- **Weekly Test: The test is based on Python, so revise Python topics thoroughly before the test. Attempt the weekly test focused on Python and aim to score higher than the average marks.**
- **Sectional Test: There is no sectional test this week. Use this time to revise previous topics, review your tests, and practice the areas where you have made mistakes.**

Course Completion Guidelines:

- **Statistics Course:**
    - **If you have completed more than 45% of the Statistics course, your progress is satisfactory. Continue to build on this foundation.**
    - **If less than 45% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, take time to review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems to reinforce your understanding.**
- **If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly. This will help ensure consistent progress and preparation for future assessments.**

Week 4:

Focused Topics and Expectations

1. **Statistics (>90%)**
    - **Aim to complete more than 90% of the Statistics course, ensuring a thorough understanding of both basic and advanced statistical concepts.**
2. **LRDI (3%-5%)**

    - **Focus on mastering Linear and Circular Arrangements within Logical Reasoning and Data Interpretation (LRDI).**

Performance Targets:

- **Weekly Test: This week's test will be based on Statistics. Review all relevant Statistics topics thoroughly before taking the test and aim to score above the average marks.**
- **Sectional Test: There is a sectional test on Linear and Circular Arrangements. Prepare well for this test and aim to achieve a high percentile. After the test, review your performance, identify mistakes, and practice those topics to improve.**

Course Completion Guidelines:

- **Statistics Course:**
    - **If you have completed more than 90% of the Statistics course, your progress is excellent. Continue to build on this strong foundation.**
    - **If you have not yet reached 90% completion, prioritize catching up on the required topics before taking the weekly tests to ensure you meet expectations.**
- **LRDI Course:**
    - **Aim to cover 3%-5% of the LRDI course, focusing on Linear and Circular Arrangements.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, dedicate additional time to reviewing and practicing the topics you have covered. This includes addressing difficult concepts and solving extra practice problems to reinforce your understanding.**
- **If your marks meet or exceed the targets, maintain your current study routine and ensure consistent participation in all scheduled sessions. This will help solidify your knowledge and keep you on track for future assessments.**

2nd Month Expectations and Remarks:

1. **SQL:**
    - **Expectation: Completion of 90% or more of the SQL course.**
    - **If Achieved: Excellent progress in SQL. Demonstrates a strong understanding of database concepts and query execution.**
    - **If Not Achieved: Need to prioritize completing the remaining SQL topics to meet expectations. Focus on building a solid foundation in database management.**

2. **Quantitative Aptitude:**
    - **Expectation: Completion of approximately 25% or more of the Quantitative Aptitude course.**
    - **If Achieved: Good understanding of basic Quant concepts. Continue practicing to strengthen problem-solving skills.**
    - **If Not Achieved: Focus on completing the required percentage of Quant topics. More practice needed to improve proficiency in quantitative analysis.**
3. **Python Programming:**
    - **Expectation: Completion of 90% or more of the Python course.**
    - **If Achieved: Well done on covering foundational Python concepts. Ready to explore more advanced topics.**
    - **If Not Achieved: Prioritize completing more Python topics. Ensure understanding of fundamental programming concepts, data structures and syntax.**
4. **Statistics:**
    - **Expectation: Completion of 90% or more of the Statistics course.**
    - **If Achieved: Excellent grasp of statistical methods and concepts. Ready to apply statistical analysis in practical scenarios.**
    - **If Not Achieved: Focus on completing the Statistics course. Understanding statistical techniques is crucial for data analysis and decision-making.**
5. **LRDI (Linear and Circular Arrangements):**
    - **Expectation: Completion of 3%-5% of the LRDI course, specifically focusing on Linear and Circular Arrangements.**
    - **If Achieved: Good progress in understanding logical reasoning concepts. Continue practicing to improve arrangement-solving skills.**
    - **If Not Achieved: Allocate more time to LRDI, particularly Linear and Circular Arrangements. Practice solving different types of arrangements to enhance problem-solving abilities.**

Overall Performance:

- **Test Scores: Aim for scores consistently above average in weekly tests.**
- **Revision and Practice: Regularly review and practice topics to reinforce learning and improve test performance.**

Additional Activities:

- **Group Discussions and Sessions: Active participation enhances collaborative and communication skills.**
- **Reflection and Planning: Reflect on progress to identify strengths and areas needing improvement, and plan accordingly for ongoing learning and development.**

MONTH 3

Week 1:

Focused Topics and Expectations

1. **Machine Learning (5%-10%)**
    - **Topics: Python Basics, NumPy, and Pandas**
    - **Additional Guidance:**
        - **Begin with understanding Python syntax and basic programming constructs.**
        - **Learn to use NumPy for numerical computations and Pandas for data manipulation.**
        - **Explore Machine Learning blogs and updated modules to stay current with industry trends.**
2. **LRDI (Logical Reasoning and Data Interpretation) (~10%)**
    - **Topics: Line Bar, Column Pie Charts, Tables**
    - **Additional Guidance:**
        - **Focus on understanding how to interpret various data visualizations.**
        - **Practice solving problems related to interpreting charts and tables quickly and accurately.**

Performance Targets:

- **Weekly Test: Based on Machine Learning. Revise all relevant ML topics thoroughly before taking the test and aim to score higher than the average marks.**
- **Sectional Tests: There are two sectional tests this week: one on Linear Arrangement and one on Circular Arrangement. Prepare well for these tests and aim to achieve high scores.**

Course Completion Guidelines:

- **Machine Learning Course:**
    - **If you have completed more than 8% of the ML course, your progress is good. Continue to build on this foundation.**
    - **If less than 8% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, dedicate additional time to reviewing and practicing the topics you have covered. This includes addressing difficult concepts and solving extra practice problems to reinforce your understanding.**
- **If your marks meet or exceed the targets, maintain your current study routine and ensure consistent participation in all scheduled sessions. This will help solidify your knowledge and keep you on track for future assessments.**

Extra Guidance:

- **Time Management: Allocate specific time slots for each subject and stick to a consistent study schedule.**
- **Active Learning: Engage in active learning techniques, such as summarizing what you've learned, teaching the concepts to someone else, or creating mind maps.**
- **Practice Problems: Regularly practice problems, especially for LRDI, to improve speed and accuracy.**
- **Stay Updated: Regularly read Machine Learning blogs and current updated modules to stay informed about the latest trends and advancements in the field.**
- **Seek Help: If you encounter difficult topics, don't hesitate to seek help from peers, instructors, or online forums.**
- **Healthy Habits: Maintain a balanced routine with adequate sleep, nutrition, and physical activity to keep your mind sharp and focused.**

Week 2:

Focused Topics and Expectations

1. **Machine Learning (15%-20%)**
    - **Topics: Pandas for Exploratory Data Analysis (EDA), Seaborn, Matplotlib**
    - **Aim to complete more than 15%.**
    - **Additional Guidance:**
        - **Use Pandas for data cleaning and manipulation.**
        - **Create visualizations using Seaborn and Matplotlib.**
        - **Attempt course quizzes and work on mini projects involving EDA, regression, and classification.**
2. **LRDI (Logical Reasoning and Data Interpretation) (~15%)**
    - **Topics: Line Bar, Column Pie Charts, Tables**
    - **Aim to complete more than 15%**
    - **Additional Guidance:**
        - **Practice solving problems related to various data visualizations to improve speed and accuracy.**

Performance Targets:

- **Weekly Test: Based on Machine Learning. Review all relevant ML topics thoroughly before taking the test and aim to score higher than the average marks.**
- **Sectional Tests: There are four sectional tests this week: Line Bar, Column Pie Charts, and Tables. Prepare well for these tests and aim to achieve high scores.**

Course Completion Guidelines:

- **Machine Learning Course:**
    - **If you have completed more than 15% of the ML course, your progress is good. Continue to build on this foundation.**
    - **If less than 15% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, dedicate additional time to reviewing and practicing the topics you have covered. This includes addressing difficult concepts and solving extra practice problems to reinforce your understanding.**
- **If your marks meet or exceed the targets, maintain your current study routine and ensure consistent participation in all scheduled sessions. This will help solidify your knowledge and keep you on track for future assessments.**

Week 3:

Focused Topics and Expectations

1. **Machine Learning (~27%)**
    - **Topics: Exploratory Data Analysis (EDA), Bivariate, Univariate, Multivariate Analysis, Feature Scaling**
    - **Additional Guidance:**
        - **Dive deeper into EDA techniques and understand the different types of analysis (bivariate, univariate, multivariate).**
        - **Learn about feature scaling methods and their importance in ML models.**
        - **Attempt quizzes provided during the course to reinforce your understanding.**
2. **Quantitative Aptitude: (~15%)**
    - **Topics: Time and Work**
    - **Additional Guidance:**
        - **Focus on understanding and solving problems related to time and work efficiently.**
        - **Practice various problem sets to improve speed and accuracy.**

Performance Targets:

- **Weekly Test: Based on Machine Learning. Review all relevant ML topics thoroughly before taking the test and aim to score higher than the average marks.**
- **Sectional Test: Time and Work. Prepare well for this test and aim to achieve high scores.**

Course Completion Guidelines:

- **Machine Learning Course:**
    - **If you have completed more than 27% of the ML course, your progress is good. Continue to build on this foundation.**
    - **If less than 27% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, dedicate additional time to reviewing and practicing the topics you have covered. This includes addressing difficult concepts and solving extra practice problems to reinforce your understanding.**
- **If your marks meet or exceed the targets, maintain your current study routine and ensure consistent participation in all scheduled sessions. This will help solidify your knowledge and keep you on track for future assessments.**

Week 4:

Focused Topics and Expectations

1. **Machine Learning (~35%)**
    - **Topics: Feature Engineering, Feature Extraction, Imbalanced Dataset, Data Augmentation**
    - **Additional Guidance:**
        - **Focus on understanding and applying various feature engineering and extraction techniques.**
        - **Learn how to handle imbalanced datasets and apply data augmentation methods.**
        - **Attempt quizzes provided during the course to reinforce your understanding.**

2. Quant (20%):Average, Mixture & Allegations

3. Product Management (20%): Expectation: Start the Product Management course and complete 20% of the course content.

Topics:

1. **Introduction to Product Management: Role and responsibilities, key competencies, and processes.**
2. **Product Lifecycle: Stages, product development, and go-to-market strategy.**
3. **Market Research: Identifying customer needs, competitive analysis, and user research.**

Performance Targets:

- **Weekly Test: Based on Machine Learning. Review all relevant ML topics thoroughly before taking the test and aim to score higher than the average marks.**
- **No Sectional Tests: Use this time to revise previous topics and solidify your understanding.**

Course Completion Guidelines:

- **Machine Learning Course:**
  - **If you have completed more than 35% of the ML course, your progress is good. Continue to build on this foundation.**
  - **If less than 35% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.**

Revision and Practice:

- **If your average total marks are less than the sum of the averages of Weekly Tests, dedicate additional time to reviewing and practicing the topics you have covered. This includes addressing difficult concepts and solving extra practice problems to reinforce your understanding.**
- **If your marks meet or exceed the targets, maintain your current study routine and ensure consistent participation in all scheduled sessions. This will help solidify your knowledge and keep you on track for future assessments.**

3rd Month Expectations and Remarks

1. Machine Learning:

- **Expectation: Completion of 35% or more of the Machine Learning course.**
- **If Achieved:**
  - **Remark: Excellent progress. You have a strong foundation in machine learning concepts and practical applications. Continue to explore advanced topics and work on more complex projects.**

- **If Not Achieved:**
    - **Remark: Focus on completing the pending topics. Review the basics and attempt quizzes to solidify your understanding. Allocate extra study time to ensure you meet the expectations for the upcoming weeks.**

2. Quantitative Aptitude:

- **Expectation: Completion of approximately 20% or more of the Quantitative Aptitude course.**
- **If Achieved:**
    - **Remark: Good understanding of Quant concepts. Your problem-solving skills are improving. Keep practicing to further enhance your proficiency.**
- **If Not Achieved:**
    - **Remark: Prioritize completing the required percentage of Quant topics. Practice additional problems and seek help if necessary to understand the concepts better. Ensure consistent effort in the upcoming weeks.**

3. Python Programming:

- **Expectation: Completion of 90% or more of the Python course.**
- **If Achieved:**
    - **Remark: Well done on covering foundational Python concepts. You are ready to explore more advanced topics and applications in Python programming.**
- **If Not Achieved:**
    - **Remark: Prioritize completing more Python topics. Ensure you understand fundamental programming concepts, data structures, and syntax. Practice coding problems from various sources to strengthen your skills.**

4. Statistics:

- **Expectation: Completion of 90% or more of the Statistics course.**
- **If Achieved:**
    - **Remark: Excellent grasp of statistical methods and concepts. You are well-prepared to apply statistical analysis in practical scenarios. Continue to delve into advanced statistical techniques.**
- **If Not Achieved:**
    - **Remark: Focus on completing the Statistics course. Understanding statistical techniques is crucial for data analysis and decision-making. Review the learned topics and practice additional problems.**

5. LRDI (Logical Reasoning and Data Interpretation):

- **Expectation: Completion of 3%-5% of the LRDI course, specifically focusing on Linear and Circular Arrangements.**
- **If Achieved:**

    - **Remark: Good progress in understanding logical reasoning concepts. Your arrangement-solving skills are improving. Keep practicing to further enhance your abilities.**
- **If Not Achieved:**
    - **Remark: Allocate more time to LRDI, particularly Linear and Circular Arrangements. Practice solving different types of arrangements to improve your problem-solving skills.**

6. SQL:

- **Expectation: Completion of 90% or more of the SQL course.**
- **If Achieved: Proficient in SQL queries, database management, and data manipulation. Apply these skills to real-world data tasks.**
- **If Not Achieved: Focus on completing the remaining topics. Practice SQL queries and database management tasks regularly.**

7. Product Management:

- **Expectation : Completion of 20% of the course content.**
- **If Achieved: Remark: Good start in understanding foundational concepts. Continue exploring the course for deeper insights.**
- **If Not Achieved: Remark: Dedicate more time to Product Management topics to build a strong foundation for advanced concepts.**

General Guidance

- **Time Management: Stick to a consistent study schedule, allocating specific time slots for each subject.**
- **Active Learning: Use techniques like summarizing, teaching concepts to someone else, and creating mind maps.**
- **Practice Problems: Regular practice is crucial, especially for Quant and LRDI, to improve speed and accuracy.**
- **Mini Projects: Undertake small projects in Machine Learning to apply concepts practically and reinforce learning.**

MONTH 4

Week 1:

Focused Topics and Expectations

Machine Learning (nearly 50% Completed)

- **Gradient Descent**
- **Bias and Variance**
- **Linear Regression**
- **Underfitting and Overfitting**
- **Regularization (Ridge and Lasso Regression)**
- **Logistic Regression**
- **ROC and AUC Curve**

Deep Learning (Near 15%)

- **Neural Network**
- **Activation Functions**
- **Gradient Descent for Neural Networks**
- **Artificial Neural Networks (ANN)**
- **Normalizing Input**
- **Regularization and Normalizing Inputs and Models**

Quant (30%)

- **Time Speed Distance**

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark of 35.
- **Sectional Test Marks:** This week Sectional Test is based on Time,Speed and Distance . Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **Machine Learning Course:**
    - If you have completed more than 50% of the ML course, your progress is satisfactory. Continue to refine and apply your knowledge.
    - If less than 50% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.

- **Deep Learning Course:**
    - If you have completed more than 15% of the Deep Learning course, your progress is on track. Keep practicing to solidify your skills.
    - If less than 15% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.

Revision and Practice:

- If your average total marks fall below the sum of the averages of Weekly and Sectional Tests, review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems.
- If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly to ensure consistent progress and preparation for future assessments.

Week 2:

Focused Topics and Expectations

Machine Learning (70% Completed)

- **Decision and Classification Tree**
- **Regression Tree**
- **Random Forest**
- **Cross Validation**
- **Bayes Theorem**
- **Naive Bayes**
- **K-Means Clustering**

Deep Learning (35% Completed)

- **Gradient Checking**
- **Gradient Descent with Momentum**
- **RMSprop**
- **Adam Optimizer**
- **Hyperparameter Tuning**
- **Batch Normalization**
- **Softmax Regression**
- **TensorFlow**
- **Data Augmentation**

VARC (nearly 10%) : READING COMPREHENSION

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark .
- **Sectional Test Marks:** This week Sectional Test is based on VARC Reading Comprehension .Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **Machine Learning Course:**
    - If you have completed more than 70% of the ML course, your progress is satisfactory. Continue to refine and apply your knowledge.
    - If less than 70% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.
- **Deep Learning Course:**
    - If you have completed more than 35% of the Deep Learning course, your progress is on track. Keep practicing to solidify your skills.
    - If less than 35% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.

Revision and Practice:

- If your average total marks fall below the sum of the averages of Weekly and Sectional Tests, review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems.
- If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly to ensure consistent progress and preparation for future assessments.

Week 3:

Focused Topics and Expectations

Machine Learning (85% Completed)

- **K-Nearest Neighbour**
- **Diabetes Classification**
- **Support Vector Machine (SVM)**
- **SVM Kernel**

Deep Learning (50% Completed)

- **Computer Vision**
- **Edge Detection**

- **Padding and Strides**
- **Convolution**
- **Pooling in CNN**
- **ResNet from Scratch**
- **Inception Network**

VARC (nearly 20%) : READING COMPREHENSION

Product Management (50%): Expectation: Go through the Product Management course and complete 50% of the course content.

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark of 35.
- **Sectional Test Marks:** This week Sectional Test is based on VARC Reading Comprehension .Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **Machine Learning Course:**
    - If you have completed more than 85% of the ML course, your progress is satisfactory. Continue to refine and apply your knowledge.
    - If less than 85% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.
- **Deep Learning Course:**
    - If you have completed more than 50% of the Deep Learning course, your progress is on track. Keep practicing to solidify your skills.
    - If less than 50% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.

Revision and Practice:

- If your average total marks fall below the sum of the averages of Weekly and Sectional Tests, review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems.
- If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly to ensure consistent progress and preparation for future assessments.

Week 4:

Focused Topics and Expectations

Machine Learning (100% Completed)

- **Principal Component Analysis (PCA)**
- **Curse of Dimensionality**
- **Linear Discriminant Analysis (LDA)**
- **t-SNE**
- **Bagging**
- **Boosting and Stacking**
- **XGBoost**

Deep Learning (70% Completed)

- **Image Classification with MobileNet**
- **Landmark and Object Detection**
- **Non-Max Suppression**
- **YOLO Algorithm**
- **Face Recognition**
- **Siamese Network**
- **Backpropagation with RNN**
- **GRU Explained**

VARC (nearly 50%) : Verbal Ability

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark of 35.
- **Sectional Test Marks:** There are Sectional Test based on Verbal Ability . Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **Machine Learning Course:**
    - If you have completed more than 100% of the ML course, your progress is satisfactory. Continue to refine and apply your knowledge.
    - If less than 100% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.
- **Deep Learning Course:**
    - If you have completed more than 70% of the Deep Learning course, your progress is on track. Keep practicing to solidify your skills.

    - If less than 70% is completed, focus on covering the necessary topics before taking the tests to meet the expectations.

Revision and Practice:

- If your average total marks fall below the sum of the averages of Weekly and Sectional Tests, review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems.
- If your marks meet or exceed the target, maintain your current study pace and continue attending sessions regularly to ensure consistent progress and preparation for future assessments.

Overall 4th Month Expectations and Remarks

Machine Learning:

- **Expectation: Completion of 90% or more of the Machine Learning course.**
    - **If Achieved: Excellent progress. Demonstrates a solid foundation in machine learning concepts and practical applications. Continue exploring advanced topics and working on more complex projects.**
    - **If Not Achieved: Focus on completing the pending topics. Review the basics, attempt quizzes, and allocate extra study time to ensure you meet expectations for the upcoming weeks.**

Deep Learning:

- **Expectation: Completion of 70% or more of the Deep Learning course.**
    - **If Achieved: Solid foundation in Deep Learning. Continue building on this knowledge for more complex models and practical applications.**
    - **If Not Achieved: Prioritize completing more Deep Learning topics. Ensure understanding of core concepts and applications, and allocate additional time for practice and review.**

Quantitative Aptitude:

- **Expectation: Completion of 30% or more of the Quantitative Aptitude course.**
    - **If Achieved: Good understanding of Quant concepts. Problem-solving skills are improving. Continue practicing to further enhance proficiency.**
    - **If Not Achieved: Focus on completing the required percentage of Quant topics. Practice additional problems and seek help if necessary to understand the concepts better. Ensure consistent effort in the upcoming weeks.**

Python Programming:

- **Expectation: Completion of 90% or more of the Python course.**
    - **If Achieved: Well done on covering foundational Python concepts. Ready to explore more advanced topics and applications in Python programming.**
    - **If Not Achieved: Prioritize completing more Python topics. Ensure understanding of fundamental programming concepts, data structures, and syntax. Practice coding problems from various sources to strengthen skills.**

Statistics:

- **Expectation: Completion of 90% or more of the Statistics course.**
    - **If Achieved: Excellent grasp of statistical methods and concepts. Well-prepared to apply statistical analysis in practical scenarios. Continue delving into advanced statistical techniques.**
    - **If Not Achieved: Focus on completing the Statistics course. Understanding statistical techniques is crucial for data analysis and decision-making. Review learned topics and practice additional problems.**

LRDI (Logical Reasoning and Data Interpretation):

- **Expectation: Completion of 5%-10% of the LRDI course, specifically focusing on Linear and Circular Arrangements.**
    - **If Achieved: Good progress in understanding logical reasoning concepts. Arrangement-solving skills are improving. Keep practicing to further enhance abilities.**
    - **If Not Achieved: Allocate more time to LRDI, particularly Linear and Circular Arrangements. Practice solving different types of arrangements to improve problem-solving skills.**

VARC (Verbal Ability and Reading Comprehension):

- **Expectation: Completion of 50% or more of the VARC course.**
    - **If Achieved: Strong foundation in verbal ability and reading comprehension. Your skills in understanding and interpreting written material are improving. Continue practicing to further enhance your abilities.**
    - **If Not Achieved: Focus on completing the required percentage of VARC topics. Practice additional reading comprehension exercises and verbal ability questions. Ensure consistent effort in the upcoming weeks.**

SQL:

- **Expectation: Completion of 90% or more of the SQL course.**
- **If Achieved: Proficient in SQL queries, database management, and data manipulation. Apply these skills to real-world data tasks.**

- **If Not Achieved: Focus on completing the remaining topics. Practice SQL queries and database management tasks regularly.**

Product Management:

- **Expectation : Completion of 50% of the course content.**
- **If Achieved: Give feedback, "Basics of product management are covered."**
- **If Not Achieved: Give feedback, "Student should allocate more time to product management" and suggest resources like "Inspired: How To Create Products Customers Love by Marty Cagan."**

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MONTH 5

Week 1:

Focused Topics and Expectations

Deep Learning (90% Completed)

- Master advanced topics: LTSM, Word Embedding in NLP, Attention Models.
- Implement Deep Learning projects: Basic ANN to predict fuel efficiency, Poetry Generation using LTSM and NLP.

Excel and Power BI (~50%)

- Data Modeling: Understand how to create relationships between tables.
- Maps and Introduction to Charts in Power BI..
- Data Visualization: Explore various types of visualizations (e.g., bar charts, line charts, maps) and techniques for effective communication of insights.

Quant (Nearly 35%): Permutations and Combinations

Performance Targets:

- Weekly Test Score: Aim to achieve a score higher than the average mark This Weekly Test .is based on Tech .
- Sectional Test Marks: This Sectional Test is based on Permutation and Combination .Strive to score above the average marks.

- Expected Total Marks: Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

Deep Learning Course:

- Ensure comprehensive understanding of all topics covered. Aim to complete more than 90% of the Deep Learning course material.
- If more than 90% completed, continue practicing to solidify skills.
- If less than 90% completed, focus on covering necessary topics before tests.

Excel and Power BI Course(50 %):

- Master data modeling, DAX, and visualization techniques.

Revision and Practice:

- Review and practice to reinforce learning in both Deep Learning and Power BI.
- Engage in project work to apply theoretical knowledge practically.

Week 2:

Focused Topics and Expectations

Deep Learning (100% Completed)

- Master advanced topics: CNN (Convolutional Neural Networks), RNN (Recurrent Neural Networks), ANN (Artificial Neural Networks).
- Consolidate knowledge through practical implementation and projects.

Excel and Power BI (>90%)

- **Tables and Matrices in Power BI**
- **Advanced Visualisation in Power BI.**

Quant(45%): Probability and Numbers

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark .

- **Sectional Test Marks:** Strive to score above the average marks.This weekly Test is based on Probability.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **Deep Learning Course:** Ensure comprehensive understanding of all topics covered. Aim to complete 100% of the Deep Learning course material.
    - If more than 100% completed, focus on advanced applications and projects.
    - If less than 100% completed, prioritize finishing the remaining topics before tests.
- **General AI Course:** Aim to complete 50% of the course material this week.
    - If more than 50% completed, review and reinforce concepts through practical exercises.
    - If less than 50% completed, ensure coverage of essential topics to meet expectations.

Revision and Practice:

- Review and practice to reinforce learning in both Deep Learning and General AI.
- Engage in project work to apply theoretical knowledge practically.

Week 3:

Featured Topics

General Artificial Intelligence (Gen AI) (50% Completed)

- Review and solidify understanding of:
    - Introduction to Artificial Intelligence and its Types
    - Basics of Machine Learning (Supervised, Unsupervised, Reinforcement Learning)
    - Key Machine Learning Algorithms (Regression, Classification, Clustering)
    - Deep Learning Fundamentals (Neural Networks, CNN, RNN)
    - Introduction to Natural Language Processing (NLP)
    - Basics of Computer Vision
    - Ethical Considerations in AI
    -

Quant (Nearly 70%): Equations and Sequence and Series.

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark .This weekly Test is based on Deep Learning.
- **Sectional Test Marks:** Strive to score above the average marks. Based on Numbers
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **General AI Course:**
    - Aim to complete 100% of the General AI course material.
    - Ensure thorough understanding of advanced topics and their applications.

Revision and Practice:

- Review and practice advanced concepts in General AI.
- Begin applying theoretical knowledge to Project 1 effectively.

Additional Strategies for Success:

- Regularly engage in project discussions and seek feedback.
- Stay updated with current AI trends and integrate new insights into project work.

Week 4:

Focused Topics and Expectations

- **General AI (100% Completed)**
    - Advanced Topics in General AI
    - Advanced Natural Language Processing (NLP) Techniques
    - Advanced Deep Learning Techniques (Generative Models, Transfer Learning)
    - Reinforcement Learning: Advanced Algorithms and Applications
    - AI Ethics: Bias and Fairness, Transparency and Explainability
    - Deploying AI Models: Techniques and Best Practices
    - Current Trends and Future Directions in AI Research

Project Work: Project 1(Nearly 50%) (Example : Uber Data analytics project**)**

- **Plan Preparation and Initiation:**
    - Define project objectives, scope, and deliverables.
    - Conduct initial research and gather necessary resources.
    - Create a detailed project plan including timelines and milestones.
    - Begin initial stages of project development.

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark.

- **Sectional Test Marks:** There are no specific sectional tests this week, focus on completing the project work and other assignments.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

- **General AI Course:**
    - If you have completed more than 100% of the General AI course, your progress is satisfactory. Continue to refine and apply your knowledge.
    - If less than 100% is completed, prioritize finishing the required topics before attempting the weekly tests to ensure you meet expectations.

Project Work:

- **If Project 1 is Initiated Successfully:**
    - Remark: Excellent start to your project. Your objectives, scope, and deliverables are clearly defined. Continue following the project plan and progress through the development stages as scheduled.
- **If Project 1 is Not Initiated Successfully:**
    - Remark: Focus on clearly defining the project objectives and scope. Ensure you have all necessary resources and a detailed plan before proceeding. Allocate extra time to get back on track.

Revision and Practice:

- **If your average total marks fall below the sum of the averages of Weekly and Sectional Tests:** Review and practice the topics you've learned. This includes revisiting difficult concepts and working on additional practice problems.
- **If your marks meet or exceed the target:** Maintain your current study pace and continue attending sessions regularly to ensure consistent progress and preparation for future assessments.

Additional Activities:

- **Keep Practicing DPPs:** Daily Practice Problems (DPPs) to strengthen your problem-solving skills.
- **Attempt Coding Tests:** Regular coding tests to enhance your programming abilities and prepare for practical applications.

5th Month Overall Expectations and Remarks

Machine Learning:

- **Expectation:** Completion of 90% or more of the Machine Learning course.

    - **If Achieved:** Excellent progress. Demonstrates a solid foundation in machine learning concepts and practical applications. Continue exploring advanced topics and working on more complex projects.
    - **If Not Achieved:** Focus on completing the pending topics. Review the basics, attempt quizzes, and allocate extra study time to ensure you meet expectations for the upcoming weeks.

Deep Learning:

- **Expectation:** Completion of 90% or more of the Deep Learning course.
    - **If Achieved:** Solid foundation in Deep Learning. Continue building on this knowledge for more complex models and practical applications.
    - **If Not Achieved:** Prioritize completing more Deep Learning topics. Ensure understanding of core concepts and applications, and allocate additional time for practice and review.

Quantitative Aptitude:

- **Expectation:** Completion of 70% or more of the Quantitative Aptitude course.
    - **If Achieved:** Good understanding of Quant concepts. Problem-solving skills are improving. Continue practicing to further enhance proficiency.
    - **If Not Achieved:** Focus on completing the required percentage of Quant topics. Practice additional problems and seek help if necessary to understand the concepts better. Ensure consistent effort in the upcoming weeks.

Python Programming:

- **Expectation:** Completion of 90% or more of the Python course.
    - **If Achieved:** Well done on covering foundational Python concepts. Ready to explore more advanced topics and applications in Python programming.
    - **If Not Achieved:** Prioritize completing more Python topics. Ensure understanding of fundamental programming concepts, data structures, and syntax. Practice coding problems from various sources to strengthen skills.

Statistics:

- **Expectation:** Completion of 90% or more of the Statistics course.
    - **If Achieved:** Excellent grasp of statistical methods and concepts. Well-prepared to apply statistical analysis in practical scenarios. Continue delving into advanced statistical techniques.
    - **If Not Achieved:** Focus on completing the Statistics course. Understanding statistical techniques is crucial for data analysis and decision-making. Review learned topics and practice additional problems.

LRDI (Logical Reasoning and Data Interpretation):

- **Expectation:** Completion of 5%-10% of the LRDI course, specifically focusing on Linear and Circular Arrangements.
    - **If Achieved:** Good progress in understanding logical reasoning concepts. Arrangement-solving skills are improving. Keep practicing to further enhance abilities.
    - **If Not Achieved:** Allocate more time to LRDI, particularly Linear and Circular Arrangements. Practice solving different types of arrangements to improve problem-solving skills.

VARC (Verbal Ability and Reading Comprehension):

- **Expectation:** Completion of 50% or more of the VARC course.
    - **If Achieved:** Strong foundation in verbal ability and reading comprehension. Your skills in understanding and interpreting written material are improving. Continue practicing to further enhance your abilities.
    - **If Not Achieved:** Focus on completing the required percentage of VARC topics. Practice additional reading comprehension exercises and verbal ability questions. Ensure consistent effort in the upcoming weeks.

Excel and Power BI:

- **Expectation:** Completion of 90% or more of the Excel and Power BI course.
    - **If Achieved:** Excellent proficiency in Excel and Power BI. Ready to apply these skills in practical data analysis and visualization tasks.
    - **If Not Achieved:** Prioritize completing the remaining topics. Focus on mastering key functionalities and practical applications.

General AI:

- **Expectation:** Completion of 100% of the General AI course.
    - **If Achieved:** Outstanding comprehension of advanced AI topics. Well-prepared to apply knowledge in practical scenarios and research.
    - **If Not Achieved:** Ensure complete understanding of all topics. Review advanced techniques and their applications.

Project Work:

- **Expectation:** Successful progression and completion of Project 1.
    - **If Achieved:** Excellent progress in project development. Continue following the project plan and meeting milestones.
    - **If Not Achieved:** Allocate more time to project work. Ensure adherence to project plan and timelines. Seek guidance if needed to stay on track.

SQL:

- **Expectation:** Completion of 90% or more of the SQL course.

- **If Achieved:** Proficient in SQL queries, database management, and data manipulation. Apply these skills to real-world data tasks.
- **If Not Achieved:** Focus on completing the remaining topics. Practice SQL queries and database management tasks regularly.

MONTH 6

Week 1

Focused Topics and Expectations

1. LRDI (30% Completed):

- Venn Diagram
- Syllogism

2. Project 1(100%): Uber Data analytics project**(Continued)**

- Data Collection: Collect and preprocess the dataset required for the project.
- Exploratory Data Analysis (EDA): Perform EDA to understand the data characteristics and identify any potential issues.
- Model Selection: Research and decide on the models and techniques to be used for the project.
- Implementation: Start implementing the chosen models and techniques on the dataset.
- Initial Results: Evaluate the initial results and make necessary adjustments to the model or approach.

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark.
- **Sectional Test Marks:** Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines

1.LRDI (Logical Reasoning and Data Interpretation):

- **Completion Target:** 30%
- **Guidelines:**
    - **Steady Progress:** Aim for 30% completion.
    - **Regular Practice:** Consistently solve various LRDI problems.
    - **Focus on Weak Areas:** Prioritize topics like Venn Diagrams and Syllogisms.
    - **Mock Tests:** Take periodic mock tests for evaluation.

Project 1: Loan Application Predictor Project

- **Completion Target:** 100%

Guidelines:

- **Data Collection and Preprocessing:** Collect and preprocess the dataset.
- **Exploratory Data Analysis (EDA):** Perform EDA to understand data characteristics and identify potential issues.
- **Model Selection:** Research and decide on suitable models and techniques.
- **Implementation:** Implement chosen models and techniques on the dataset.
- **Initial Evaluation:** Evaluate initial results, make necessary adjustments to the model or approach.
- **Tuning and Refinement:** Tune hyperparameters, adjust models based on feedback, and document the process.
- **Interim Evaluation:** Conduct interim evaluation and refine approach based on results

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark.
- **Sectional Test Marks:** Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Revision and Practice:

- **LRDI:** Regular practice, review concepts, focus on weak areas.
- **Project:** Refine models, document the process, seek feedback.

Additional Strategy for Success:

- **Structured Plan:** Follow your weekly learning plan.
- **Consistent Practice:** Regular problem-solving.
- **Seek Help:** Use resources for challenging topics

Week 2:

Focused Topics and Expectations

LRDI (60% Completed):

- **Topics:**
    - Calendar and Clocks
    - Number and Letter Series

Project 2: Loan Application Predictor Project(Upto 50%)

- **Objective Definition:** Define the objective of predicting loan application approval based on applicant data.
- **Data Collection:** Gather a dataset containing loan application records with relevant features such as applicant income, credit history, loan amount, etc.
- **Project Plan:** Develop a project plan outlining the tasks, timelines, and milestones.
- **Environment Setup:** Set up the necessary environment and tools for data analysis and model development, including Python libraries such as pandas, scikit-learn, and TensorFlow.

Product Management: Student should start Product Management and complete >90% of the course content.

    - Topics: RCA ,Guesstimates,Few Projects from Course

Performance Targets:

- **Weekly Test Score:** Aim to achieve a score higher than the average mark.
- **Sectional Test Marks:** Strive to score above the average marks.
- **Expected Total Marks:** Total score across all tests should exceed the sum of the averages of Weekly and Sectional Tests.

Course Completion Guidelines:

LRDI:

- **If Target (60% Completion) Achieved:**
    - **Feedback:** Excellent progress in LRDI. You have demonstrated a strong grasp of Calendar and Clocks, and Number and Letter Series. Continue practicing to maintain proficiency.
- **If Target Not Achieved:**
    - **Feedback:** Focus on completing the remaining topics to reach the 60% target. Review concepts thoroughly and practice more problems to strengthen understanding. Allocate extra time if necessary to catch up on missed topics.

Project 2: Loan Application Predictor Project:

- **If Target (40% Completion) Achieved:**
    - **Feedback:** Well done on defining project objectives, collecting relevant data, and setting up the project environment. Begin implementing the models and continue to monitor progress closely.
- **If Target Not Achieved:**
    - **Feedback:** Ensure the project objectives are clearly defined and revisit the data collection phase if needed. Review the project plan to identify any delays or challenges and adjust timelines accordingly. Seek assistance or resources to overcome obstacles and maintain momentum in project development.
    -

Revision and Practice:

- **LRDI:** Consistent practice and review of concepts, focusing on weak areas.
- **Project:** Continuously refine models and document the process, seek feedback, and adjust as needed.

Week 3:

Featured Topics

LRDI(>90%):

- **Featured Topics: Non-verbal Reasoning, Blood Relations**
- **Performance Targets: Achieve >90% completion with Non-verbal Reasoning and Blood Relations.**

VARC:

- **Featured Topics: Paragraph Summary**
- **Performance Targets: Aim for 70%-75% completion in Paragraph Summary.**

Project 2: Loan Application Predictor Project(>90%)

- **Featured Topics:**
    - **Data Preprocessing: Handling missing values, encoding categorical variables, feature scaling**
    - **Exploratory Data Analysis (EDA): Understanding data characteristics, identifying patterns, visualizing relationships**
    - **Feature Selection: Using techniques like correlation analysis and feature importance**
    - **Model Selection: Researching algorithms like Logistic Regression, Decision Trees, and Random Forest**
    - **Model Implementation: Implemented initial versions of selected models using Scikit-learn, focusing on baseline performance metrics.**
    - **Initial Results: Evaluated the performance of baseline models using metrics like accuracy, precision, recall, and F1-score. Identified potential areas for model improvement and optimization.**

- **Course Completion Guidelines:**

  LRDI

    - **If Target (>90% Completion) Achieved:**
        - **Feedback: Congratulations on mastering Non-verbal Reasoning and Blood Relations. Your logical reasoning skills are strong. Maintain this level of proficiency through consistent practice.**
    - **If Target Not Achieved:**
        - **Feedback: Focus on completing the remaining topics to reach the >90% target. Practice diverse problems to strengthen your understanding of Non-verbal Reasoning and Blood Relations. Ensure thorough review of concepts for comprehensive mastery.**

  VARC:

    - **If Target (70%-75% Completion) Achieved:**
        - **Feedback: Well done on achieving a good grasp of Paragraph Summary. Your ability to summarize and interpret texts is improving. Continue practicing to refine your skills further.**
    - **If Target Not Achieved:**
        - **Feedback: Focus on completing the required percentage of VARC topics. Practice additional paragraph summary exercises to enhance your comprehension and summarization abilities. Utilize varied reading materials to broaden your understanding.**

  Project 2: Loan Application Predictor Project

    - **If Target (>90% Completion) Achieved:**
        - **Feedback: Well done on defining project objectives, collecting relevant data, and setting up the project environment. Begin implementing the models and continue to monitor progress closely.**
    - **If Target Not Achieved:**
        - **Feedback: Ensure the project objectives are clearly defined and revisit the data collection phase if needed. Review the project plan to identify any delays or challenges and adjust timelines accordingly. Seek assistance or resources to overcome obstacles and maintain momentum in project development.**
    -
- **Revision and Practice:**
    - **Review all completed topics and revisit any areas where you encountered difficulties. Practice additional problems and projects to strengthen your understanding.**

Week 4:

VARC(>90): **Parajumbles**

Personality Development: Do attend GD sessions and communication enhancement Sessions.
Interviews: Do attend Buddy interview and Mentor Interview and work on your weaknesses.
Coding Tests: Attempt coding tests regularly .

Course Completion Guidelines:

- **If Target (>90% Completion) Achieved:**
    - **Feedback: Well done on achieving a good grasp of Paragraph Summary. Your ability to summarize and interpret texts is improving. Continue practicing to refine your skills further.**
- **If Target Not Achieved:**
    - **Feedback: Focus on completing the required percentage of VARC topics. Practice additional paragraph summary exercises to enhance your comprehension and summarization abilities. Utilize varied reading materials to broaden your understanding.**

6th Month Overall Expectations and Remarks

Machine Learning:

- **Expectation:** Completion of 90% or more of the Machine Learning course.
- **If Achieved:** Excellent progress. Demonstrates a solid foundation in machine learning concepts and practical applications. Continue exploring advanced topics and working on more complex projects.
- **If Not Achieved:** Focus on completing the pending topics. Review the basics, attempt quizzes, and allocate extra study time to ensure you meet expectations for the upcoming weeks.

Deep Learning:

- **Expectation:** Completion of 90% or more of the Deep Learning course.
- **If Achieved:** Solid foundation in Deep Learning. Continue building on this knowledge for more complex models and practical applications.
- **If Not Achieved:** Prioritize completing more Deep Learning topics. Ensure understanding of core concepts and applications, and allocate additional time for practice and review.

Quantitative Aptitude:

- **Expectation:** Completion of 70% or more of the Quantitative Aptitude course.
- **If Achieved:** Good understanding of Quant concepts. Problem-solving skills are improving. Continue practicing to further enhance proficiency.
- **If Not Achieved:** Focus on completing the required percentage of Quant topics. Practice additional problems and seek help if necessary to understand the concepts better. Ensure consistent effort in the upcoming weeks.

SQL:

- **Expectation:** Completion of 90% or more of the SQL course.
- **If Achieved:** Proficient in SQL queries, database management, and data manipulation. Apply these skills to real-world data tasks.
- **If Not Achieved:** Focus on completing the remaining topics. Practice SQL queries and database management tasks regularly.

Python Programming:

- **Expectation:** Completion of 90% or more of the Python course.

- **If Achieved:** Well done on covering foundational Python concepts. Ready to explore more advanced topics and applications in Python programming.
- **If Not Achieved:** Prioritize completing more Python topics. Ensure understanding of fundamental programming concepts, data structures, and syntax. Practice coding problems from various sources to strengthen skills.

Statistics:

- **Expectation:** Completion of 90% or more of the Statistics course.
- **If Achieved:** Excellent grasp of statistical methods and concepts. Well-prepared to apply statistical analysis in practical scenarios. Continue delving into advanced statistical techniques.
- **If Not Achieved:** Focus on completing the Statistics course. Understanding statistical techniques is crucial for data analysis and decision-making. Review learned topics and practice additional problems.

LRDI (Logical Reasoning and Data Interpretation):

- **Expectation:** Completion of 30% or more of the LRDI course, focusing on Venn Diagrams, Syllogisms, Calendar and Clocks, Number and Letter Series, and Non-verbal Reasoning and Blood Relations.
- **If Achieved:** Good progress in understanding logical reasoning concepts. Arrangement-solving skills are improving. Keep practicing to further enhance abilities.
- **If Not Achieved:** Allocate more time to LRDI, particularly the specified topics. Practice solving different types of arrangements to improve problem-solving skills.

VARC (Verbal Ability and Reading Comprehension):

- **Expectation:** Completion of 90% or more of the VARC course, focusing on Parajumbles and Paragraph Summary.
- **If Achieved:** Strong foundation in verbal ability and reading comprehension. Your skills in understanding and interpreting written material are improving. Continue practicing to further enhance your abilities.
- **If Not Achieved:** Focus on completing the required percentage of VARC topics. Practice additional reading comprehension exercises and verbal ability questions. Ensure consistent effort in the upcoming weeks.

Excel and Power BI:

- **Expectation:** Completion of 90% or more of the Excel and Power BI course.
- **If Achieved:** Excellent proficiency in Excel and Power BI. Ready to apply these skills in practical data analysis and visualization tasks.
- **If Not Achieved:** Prioritize completing the remaining topics. Focus on mastering key functionalities and practical applications.

General AI:

- **Expectation:** Completion of 100% of the General AI course.
- **If Achieved:** Outstanding comprehension of advanced AI topics. Well-prepared to apply knowledge in practical scenarios and research.
- **If Not Achieved:** Ensure complete understanding of all topics. Review advanced techniques and their applications.

Project Work:

- **Expectation:** Successful progression and completion of Project 1 and Project 2.
- **If Achieved:** Excellent progress in project development. Continue following the project plan and meeting milestones.
- **If Not Achieved:** Allocate more time to project work. Ensure adherence to the project plan and timelines. Seek guidance if needed to stay on track.

Personality Development:

- **Expectation:** Attend GD sessions and communication enhancement sessions. Participate in buddy and mentor interviews and work on identified weaknesses.

Coding Tests:

- **Expectation:** Attempt coding tests regularly to reinforce programming skills.

Product Management

- **Expectation:** Completion of >90% of the Product Management course.
- **Remark if Achieved:** Excellent comprehension of product management concepts. You have a strong understanding of the product lifecycle, market research, and other key topics. Ready to apply this knowledge in practical scenarios.
- **Remark if Not Achieved:** Focus on completing the remaining topics. Ensure a thorough understanding of product management principles. Allocate extra study time to meet the course completion target.

Materials to practice:

Coding(DSA): https://leetcode.com/studyplan/top-interview-150/

DSA: https://www.youtube.com/playlist?list=PLUcsbZa0qzu3yNzzAxgvSgRobdUUJvz7p

SQL: https://leetcode.com/studyplan/top-sql-50/

Python: https://www.hackerrank.com/domains/python

Pandas Coding: https://leetcode.com/studyplan/introduction-to-pandas/

Binary Search Questions: https://leetcode.com/studyplan/binary-search/

Uber Data analytics project:
https://learn.myanalyticsschool.com/s/courses/6421e90ce4b073166f2958c7/take

Loan Application predictor project:
https://learn.myanalyticsschool.com/s/courses/6421e524e4b0105fc4bf9d78/take