Assignment 1. Explain what was learned in the Python Lab(s)  
7.5 Lab: moving average

reading time series statistics involves understanding the styles, developments, and seasonality inside a sequence of facts points accrued through the years. This technique often involves visualizing statistics, identifying key additives like trend and seasonality, and doubtlessly forecasting future values.

7.6 LAB: moving average

A moving average (MA) is a typically used technical evaluation tool that helps buyers and investors identify market developments by smoothing out rate information over a targeted length.

Assignment 2. Write a summary that fully addresses the the following question…  
**a.) Describe how to develop a systematic process for selecting and prioritizing analytics projects**

*According to Jean-Louis Boulanger (2016) 'Requirements engineering is a process in itself 'and Carol Britton, Jill Doake (2005) 'Interest in requirements engineering as a topic in its own right is relatively recent compared to system design or programming'*

Developing a systematic technique for selecting and prioritizing analytics tasks is critical for any company aiming to maximize the value derived from statistics. This involves a structured approach to assess capability of projects, align them with strategic dreams, and allocate assets efficiently.

here's a breakdown of how to expand this type of systematic technique:

1. become aware of capacity projects by sourcing thoughts and accumulating potential analytics projects from various assets, consisting of business needs, stakeholder requests, operational challenges, and opportunities for improvement.

Create a Centralized listings and collect these ideas into a complete list or backlog.

2. outline Prioritization criteria and align with business dreams: discover the key elements that will affect the priority of every challenge, ensuring they align with the organization's strategic targets. common criteria typically consist of return on investment (ROI): and the expected blessings compared to the prices.

Strategic Alignment, however nicely the assignment helps.

The urgency is time-sensitive to undertaking.

useful resource availability is the feasibility of completing the venture with available assets (finances, abilities, equipment).

stage of effort can predict the work required.

effect scores anticipate the business cost or effect on strategic targets.

Effort rating will show the resources, time, and complexity required.

Urgency factor can prodict whether the assignment addresses instantaneous challenges.

3. pick out a Prioritization Framework, the framework choice will pick a framework that gives structure for choice-making and aligns with the organization's desires and stakeholder options.

Framework examples of a scoring model will assign numerical values to each criterion for each task and calculate overall scores.

The movement-precedence Matrix can examine tasks based totally on their potential impact and effort.

cost vs. effort Matrix helps to prioritize tasks with high fee and low attempt (quick wins).

Analytic Hierarchy Process (AHP) helps to break down complicated issues into smaller elements and examine them pairwise based totally on multiple criteria.

4. evaluation and rating initiatives to follow standards, use the chosen framework to assess and rate every venture based totally on the defined criteria.

Involved stakeholders will interact with stakeholders inside the evaluation procedure to gain various views and ensure alignment.

5. Prioritize Strategically the ranking of projects, this will help prioritize tasks based on their scores, that specialize in people who offer the most value and strategic alignment.

Don't forget for any project dependencies that might influence the order of execution.

Allocate resources and assign assets (humans, tools, budget) to projects primarily based on their priority.

6. monitor and modify to track progress and constantly monitor the development of prioritized projects.

ordinarily review and assess, adjust priorities as required, based totally on converting business needs and useful resource availability.

talk and iterate the proportion venture updates and progress with stakeholders and be organized to evolve the approach based on feedback.

Through following these steps, groups can establish a strong and systematic manner for choosing and prioritizing analytics projects, ensuring that their efforts are targeted on projects that deliver the most value and align with their general strategic goals.

**b.) Explain the preparation process for how emerging trends in analytics will impact the organization in the future.**

To prepare for the impact of emerging trends in analytics, organizations should proactively evaluate their data strategy, invest in relevant technologies, and foster a data-driven culture. This involves assessing current capabilities, identifying skill gaps, and developing a plan to integrate new tools and techniques, including AI, [machine learning](https://www.google.com/search?rlz=1C1OZZY_enUS1152US1152&cs=0&sca_esv=038e23a01cebee34&sxsrf=AE3TifPD5laVVZ0K07PyVshoRmHfQSXEwg%3A1750122031146&q=machine+learning&sa=X&ved=2ahUKEwjKj8nPoPeNAxUXITQIHShcCi4QxccNegQIBBAB&mstk=AUtExfAa-0i4eMxWNdJotJ-lZa1CvpfN0bRdd7D9E30-SCGz3YPWQCKgdlhwx2zVCXAVdOzszYl5hlIabR7HS76H7F2U8ZhhLfFjGsIDBYHahFb6kY1I50lrIh4C36ChYn6ie0U4KNNNL9YGs7-C9jaRZGOlNP9Pedcd0MsZ-SLvBuAQEGI&csui=3), and cloud computing. A phased implementation approach, coupled with continuous monitoring and refinement, is crucial for successful integration.

**References** :

Jean-Louis Boulanger 2016, Certifiable Software Applications 1

https://www.sciencedirect.com/book/9781785481178/certifiable-software-applications-1

Carol Britton, Jill Doake 2005, A Student Guide to Object-Oriented Development

https://www.sciencedirect.com/book/9780750661232/a-student-guide-to-object-oriented-development