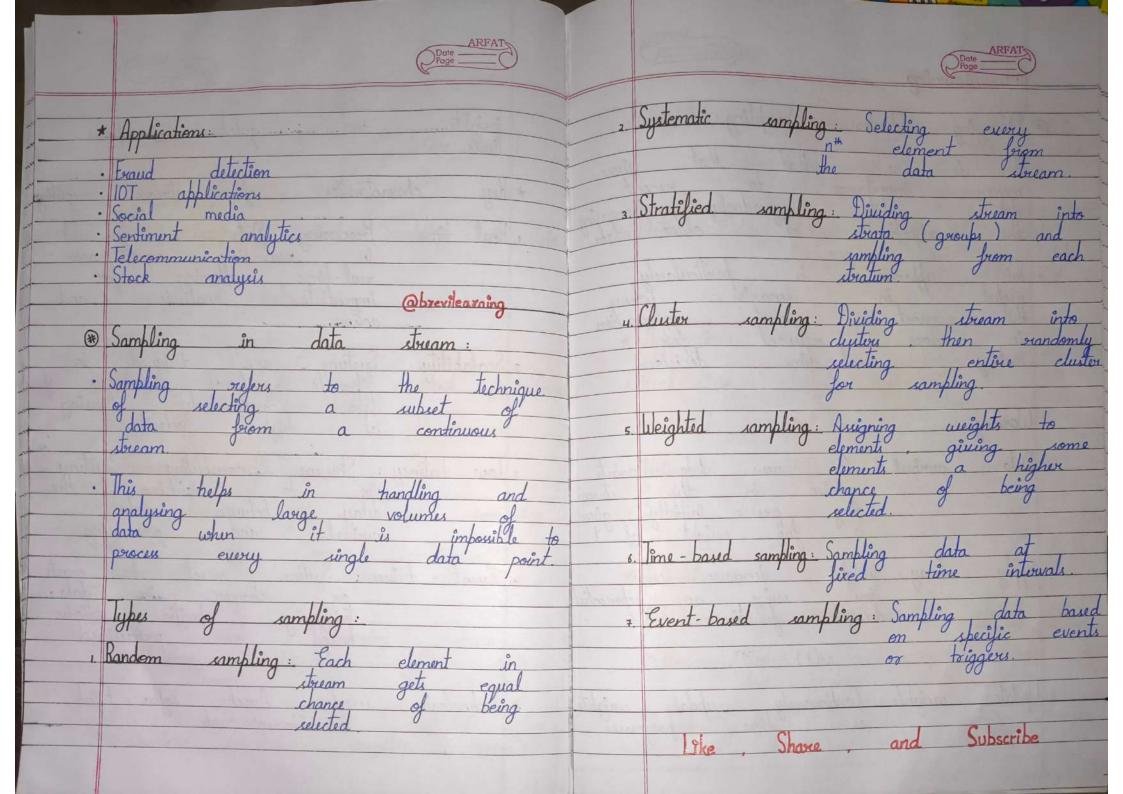
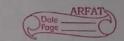


insights times.	and	quick	nespo	nse
	+ +	of	stream	computing
Real - time	brocessing:	Data 1-time	مر من	near
and markens of the	Processing: in nea neal-time, immediate action.	allouin anal	ysis Jo	and_
Scalability:	Systems handle	are large	lesigned volum	to of
	: Stream to delay arrival			
S. Yeurs	arrival	and	рхосия	ing.
Event - dri	ven: System  or  Triggering  based  rules.	changes sp	t to in ecific predefi	events data, actions ined
Technologies	used:	Apache	Kajka, I	link,

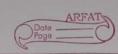


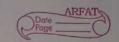
abraudening.  ARFAT	Dote Proge
Decaying Window Sampling:  H is a method that gives more importance to recent data while gradually decreasing the significance of older data.	y Weighted Aggregation: Ise weights in calculations to ensure succent data has more influence.  5 Data Expiry (Optional): Discards data points with weights below a threshold.
his approach is particularly useful in senarios where the most recent information is more relevant for making real-time decisions.	* Applications:  • Real - time analytics  • Financial markets
Dota arrival: As new data points arrive in the stream.  They are initially given a full weight of 1	
Apply decay: Weights decreases over time using an exponential decay function:  ω(+) = e <sup>-λ+</sup> .  3. Update weights: Continuously updates weights as time progresses.	Relevance: Focus on most relevant data.  • Efficiency: Reduces computational burden by down-weighting older data.  • Adaptability: Quickly adapt with changes in data patterns.
	@brevilearing YT



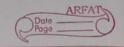
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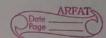
RTAP applications:	Advantages of RTAP applications
involves the immediate and will	Immediate insights: Quick access to actionable data
generated to provide instant insights and support support	Enhanced decision making: Faster and more informed decisions.
	Operational efficiency: Steamlined operations
i) Descriptive Analytics: Browids a real- time view of what is happening.	Amproved Customer Experience: Personalized and timely interactions.
ii) Diagnostic Analytics: Identifies why something happeneds in neal - time	interactions.  Competitive advantages: Stoying ahead of market trends and competitors.
Predictive Analytics: Vies real-time data to forcast future events	Disadvantages of RTAP applications:
iv) Brescriptive Analytics: Suggests great time	· High cost  · More complex
	· Security risk due to continuous data flow.
\$ (MARCH 1976)	





* Application of RTAP application:	Monitor social media platforms for mentions of the companie's products and services
1. Fraud detection 6. Smart traffic management. 2. Risk management 7. Smart home devices	companies products and sowices
	2 Real - lime Processing:
3. Customer analysis 8. Marketing	Prioces the incoming data.
4. Sentiment analysis a Social media	
s. Personalized succommunda io. IoTs	Apply NLP algorithms to analyze the text and ditect sentiments ((+ve), (-ve), neutral)
(are study: Sentiment analysis	3. Sentiment scoring:
Objective: To understand customer's sentiment towards products	· Assigns sentiment score on each review or mentions.
ond services to improve customers and services to improve customer estigaction and brand reputation.	· Categorize these feedbacks based on
brand reputation.	· Categorize these feedbacks based on the sentiment scores to identify overall trends.
• Approach:	4. Actionable insights:
Data Collection:	· Identify common themes in
from the companies website and product fudbacks	· Identify common themes in negative feedbacks to address product issues or improve
product fudbacki	· Highlight positive feedbacks in





4)

	marketing campaigns to attract	Approach:  Data collection:
	Outremes:	Coulction :
	Improved Customer Satisfaction:  Quickly addressed justes majused in negative feedback, leading to better customer service.  Improve products fased on customer's suggestions and complaints.	· Crasher historical stock price data, trading volumes and market indicators.  · Monitor geal-time financial news, social media sentiments, and economic supports.
	complaints.	- conservation transmission beautiful
	2 Enhanced marketting Strategies:  - Used possitive feedbacks to promote products, improving sales and customer's trust.	· Uses machine learning algorithms to analyze historical data and identify patturns.  · Utilizes neal-time data to continuously update predictions.
	The trade	
(#) (	ase Study: Stock predictions  Dijective: To predict stock price movements to make informed investments, and maximize networks.	Develop prodictive models using techniques such as time series analysis, and neural networks.  Validate the model using historical data to ensure accuracy.



Date Page

4. Actionable insights:	
Prediction to traders.	
The state of the s	
Highlight potential investment oppositunities and rinks based on predicted truends.	
oppositurities and rinks	7
based on predicted	
Brenas.	
turbus samuela	mosals
Outromes:	1
1. Informed investment decisions:	
· Reduced investment	
identifying potential market	
· Reduced investment visks by identifying potential market downtwent early	
· Tradere made better investments using accurate , real - time	
using accurate, real-time	
2 Increased returns:	
· And 1 + 10 + + 0	,
· Improved trading strategies led t	70
· ·	130000
Thanks for Watching!	