School: .... Campus: ....

Academic Year: .... Subject Name: .... Subject Code: ....

Semester: .... Program: .... Branch: .... Specialization: ....

Date: ....

Centurion
UNIVERSITY
Shaping Lives...
Empowering Communities...

Applied and Action Learning
(Learning by Doing and Discovery)

Name of the Experiement : Crypto Timeline – Evolution of Digital Currencies

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

•Start the process by collecting chronological data of major cryptocurrency developments.

•Identify key milestones such as Bitcoin creation, introduction of altcoins, and blockchain upgrades.

•Arrange all events sequentially according to their year of occurrence.

•Highlight technological advancements, market changes, and regulation updates.

•Display the timeline visually to show the gradual evolution of digital currencies.

•End the process after verifying the completeness of the historical data.

* Softwares used

1.Brave Web browser
2.Chrome web browser

As applicable according to the experiment.
Two sheets per experiment (10-20) to be used.

* Implementation Phase: Final Output (no error)

The concept of digital currencies has evolved over several decades, gradually shaping today's decentralized financial world. The journey began in the early 1980s with the idea of digital cash and cryptographic money. Early attempts such as **David Chaum's DigiCash (1989)** and **e-gold (1996)** introduced the concept of electronic money, but these systems relied on central control and lacked decentralization. The real transformation began with the emergence of **Bitcoin** in **2009**, developed by the pseudonymous **Satoshi Nakamoto**, which introduced **blockchain technology**—a decentralized ledger system ensuring transparency, security, and immutability.

Following Bitcoin's success, numerous **altcoins** such as **Litecoin (2011)**, **Ripple (2012)**, and **Dogecoin (2013)** entered the market, each offering unique improvements and functionalities. The introduction of **Ethereum (2015)** was a major milestone, as it brought **smart contracts** and **decentralized applications (DApps)** into the ecosystem. The rise of **Initial Coin Offerings (ICOs)** in **2017** revolutionized fundraising methods, leading to explosive growth in blockchain-based startups.

From **2020 onwards**, the cryptocurrency landscape expanded rapidly with **DeFi (Decentralized Finance)**, **NFTs (Non-Fungible Tokens)**, and **Central Bank Digital Currencies (CBDCs)** being explored by various nations. Events like **Bitcoin's price surge to new highs**, **the Ethereum 2.0 upgrade**, and **global regulatory discussions** marked a new era in digital finance. This timeline project aims to trace these key historical developments and visualize how digital currencies evolved from experimental projects into globally recognized financial systems.

* Implementation Phase: Final Output (no error)

In the implementation phase, all the historical data of cryptocurrency evolution is compiled from trusted sources such as whitepapers, blockchain research papers, and official crypto websites. Tools like **Microsoft Excel**, **Python (matplotlib or pandas)**, or **web-based timeline visualizers** are used to organize and represent the data. Each event is recorded with fields like *Year*, *Event Name*, *Technology Involved*, and *Impact*.

The collected information is then arranged in a timeline format starting from the earliest digital cash systems to modern decentralized finance platforms. Graphs and charts are generated to represent the growth of blockchain adoption, market expansion, and technology improvements. The implementation highlights how blockchain has matured from a niche concept to a mainstream financial technology influencing banking, government, and global trade systems.

* Observations

- Bitcoin was the first truly decentralized cryptocurrency (2009).
- Altcoins introduced innovation and competition in blockchain ecosystems.
- Ethereum's smart contracts paved the way for decentralized applications (DApps).
- The DeFi and NFT booms (2020–2021) marked the expansion of blockchain beyond finance.

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty:

Page No............

**As applicable according to the experiment.
Two sheets per experiment (10-20) to be used.*