TASK 2

Title: Cryptocurrency Portfolio
Internship Task: Task 2 – Cryptocurrency Portfolio Analysis
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1. ## Introduction

   Cryptocurrency has become an important part of the modern financial system. Digital currencies such as Bitcoin and Ethereum are used as investment assets due to their high return potential. However, cryptocurrencies are also highly volatile, which makes risk analysis very important.
   This project analyzes the **performance and risk** of a **cryptocurrency portfolio** consisting of **three major cryptocurrencies** over the **past 12 months**.

2. ## Objectives of the Study

   The main objectives of this project are:

   - To study the **price performance** of selected cryptocurrencies.

   - To analyze **returns and volatility (risk).**

   - To compare different cryptocurrencies.

   - To provide **investment recommendations** based on analysis.

3. ## Selected Cryptocurrencies

   The following three cryptocurrencies were selected because of their high market capitalization and popularity:

Cryptocurrency	Symbol	Reason for Selection
Bitcoin	BTC	First and most trusted cryptocurrency
Ethereum	ETH	Popular smart-contract platform
Solana	SOL	Fast blockchain with growing ecosystem

4. ## Data Collection
   - **Time Period:** Last 12 months
   - **Data Source:** CoinMarketCap / Yahoo Finance (historical prices)
   - **Price Used:** Monthly closing prices
   - **Tool Used:** Google Sheet

5. ## Google Sheet Structure
   - Sheet 1: Price Data
   - Sheet 2: Monthly Returns
   - Sheet 3: Risk & Performance Summary

6. Performance Analysis

Bitcoin (BTC)

- Bitcoin showed stable growth over the last 12 months.
- Lower volatility compared to other cryptocurrencies.
- Suitable for long-term conservative investors.

Ethereum (ETH)

- Ethereum delivered higher returns than Bitcoin.
- Growth supported by DeFi and smart contracts.
- Moderate to high risk.

Solana (SOL)

- Solana provided the highest return.
- Highly volatile in nature.
- Suitable for high-risk investors.

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7. Risk Analysis

Cryptocurrency	Risk Level	Reason
Bitcoin	Medium	Large market cap and adoption
Ethereum	Medium-High	Technology upgrades and competition
Solana	High	Network outages and volatility

Volatility is measured using standard deviation of monthly returns in Google Sheets.

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8. Portfolio Recommendation

Based on the analysis, the following portfolio allocation is recommended:

Crypto	Allocation
Bitcoin	40%
Ethereum	35%
Solana	25%

This allocation balances stability and growth.

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9. Conclusion

The cryptocurrency portfolio analysis shows that:

- Bitcoin provides stability.
- Ethereum offers balanced growth.
- Solana delivers high returns with high risk.

A diversified crypto portfolio helps reduce risk while maximizing returns.

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10. Limitations of the Study
- Cryptocurrency prices are highly volatile.
- Market conditions change rapidly.
- Analysis is based on past data only.

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11. References
- CoinMarketCap
- Yahoo Finance
- Investopedia