**Section 11: PART II FINANCE:**

**Calculating and Comparing Rates of Return in Python**

**60. Considering both risk and return**

Buying a share, Corporate/Gov debt, Real estate, Gold, Mutual/Pension Fund

- Upside: Profit Return

- Downside: Loss Risk

**Bonds**

* Avg 3% return rate
* Low risk
* Initial investment + interest

**Stock**

* Approximately 6% return
* High fluctuations
* Price change
* Higher returns are at the price of higher risk

**61. What are we going to see next?**

1. Rate of Return
2. Portfolio of securities
3. Risk, Standard deviation & Variance
4. Correlation & Covariance

Regression, Markowitz’s Portfolio Theory, CAMP, Monte Carlo Simulation

**62. Calculating a security's rate of return**

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**Simple Rate of Return:**

When dealing with multiple assets over the same time frame

**Logarithmic Rate of Return:**

When you make calculations about a single asset over time

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