

## Vallum Assignment

### 1. What is equity investing, and how would you define it?

Equity investing means buying company shares in the stock market, giving you partial ownership and a share of the profits. It's linked to the company's performance and market conditions, offering higher return potential than bonds or fixed deposits, but with higher risks.

### 2. Can you explain the GARP style of investing?

GARP (Growth at a Reasonable Price) is an investment strategy blending growth and value investing. It targets companies with consistent earnings growth that are reasonably priced, often using the PEG ratio (Price/Earnings to Growth ratio). A PEG ratio below 1 is ideal, balancing growth potential with valuation to avoid overpaying.

### 3. When analyzing companies listed on BSE & NSE, how do you differentiate between GARP style opportunities, growth-only, and value-only companies?

**Growth-only companies:** High earnings and revenue growth, reinvest profits, high P/E ratios, strong future growth projections.

**Value-only companies:** Undervalued fundamentals, low P/E and price-to-book ratios, higher dividend yields, potential for market correction.

**GARP style opportunities:** Moderate to high growth, reasonably priced, PEG ratio around or below 1, balancing growth prospects with valuation.

### 4. How comfortable are you with Python? Please provide details about your knowledge and practical application level.

I am quite comfortable with Python and have hands-on experience with it. I am familiar with the basics such as conditional statements, data types, slicing, indexing, and web scraping. I also have experience with libraries like NumPy and Pandas. I completed a project called Cars24, where I scraped data to create a CSV file. I then performed queries in SQL and generated various insights in Excel. Currently, I am furthering my Python skills by learning on Kaggle and practicing on HackerRank.

### 5. Using Python, how would you determine if a company listed on BSE & NSE follows the GARP style, considering the available data for approximately 6000 companies?

To determine if a company follows the GARP style, follow these steps:

- 1.**Data Collection:** Gather financial data like earnings growth rates, P/E ratios, etc., for all 6000 companies using financial APIs or web scraping.
- 2.**Data Cleaning And Preparation:** Clean and preprocess the data to handle missing values and ensure consistency.
- 3.**Analysis:** Calculate the PEG ratio for each company.
- 4.**Filtering:** Filter companies with a PEG ratio below 1 and a growth rate above 10%.

**6. Based on your knowledge, what insights can you derive and showcase about the following stocks: SBIN, Adani Enterprises, HUL, Tata Steels, Moil?**

**SBIN (State Bank Of India):** India's largest bank with strong government support and significant market share. Faces challenges with NPAs and economic fluctuations.

**Adani Enterprises:** Diversified conglomerate in infrastructure, energy, and logistics. Known for aggressive expansion but has high debt and regulatory scrutiny.

**HUL (Hindustan Unilever Limited):** Leading FMCG company with a strong brand portfolio and distribution network. Benefits from India's consumer market but faces competitive pressures and raw material price volatility.

**Tata Steel:** Major global steel producer with operations in India and Europe. Benefits from infrastructure growth but deals with cyclical demand, commodity price volatility, and environmental regulations.

**Moil:** Largest manganese ore producer in India, essential for steel production. Benefits from market leadership but faces commodity price fluctuations and steel sector demand.

**7. Are you familiar with web scraping techniques?**

Yes, I have experience with web scraping techniques. This involves extracting data from websites using Python libraries such as BeautifulSoup or Selenium to parse HTML and collect the necessary information from web pages.

**8. If tasked with extracting the number of NRIs across PMSs from SEBI's monthly reports for June '23, Sep '23, Dec '23, and Mar '24, how would you approach this task in terms of process, time, output file, and data accuracy?**

**1.Process:**

**Identify Data Source:** Find URLs for SEBI monthly reports.

**Scrape Data:** Use BeautifulSoup or Selenium to scrape relevant tables.

**Data Processing:** Extract and clean the data.

**Save Data:** Store in CSV or Excel format.

**2.Time:** A few hours to a day, depending on report complexity.

**3.Output File:** CSV or Excel file with columns for date, number of NRIs, and other details.

**4.Data Accuracy:** Validate scraped data, handle missing values, and cross-check totals.

**9. What configuration of devices do you believe is necessary to perform these tasks on a daily basis?**

**Hardware:** Modern computer with at least Intel i5, 8GB RAM (16GB recommended), and sufficient storage (SSD preferred).

**Software:** Python with required libraries, VSCode, reliable internet, and data visualization tools like Jupyter.

**Additional Tools:** Access to financial databases, APIs, and scraping tools. This setup enables efficient data processing, analysis, and task automation.

