

Part 3 PDF RAG LLM with Langchain (30 points):

For part 3 of Lab 2, please use the link below to download the pdf data.

[sample PDF, Gap Q1 2023 Earnings Release](#)

Ask your RAG applications these questions stated below to get appropriate and correct answers. Display the Questions and corresponding answers as the output. Your application will be tested to see how closely it generates human-like answers to the following questions.

Question and Answers:

1. A company produces 500 tons of plastic packaging annually and is subject to an Extended Producer Responsibility (EPR) scheme with a recovery target of 80%. How many tons of plastic packaging should the company aim to recover each year to meet the EPR requirement?

- EPR Recovery Target Calculation:

To meet the recovery target of 80%, the company should aim to recover 80%
80% of 500 tons, which is:

$\text{Recovery Target} = 80\% \times 500 \text{ tons} = 0.80 \times 500 \text{ tons} = 400 \text{ tons}$

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So, the company should aim to recover 400 tons of plastic packaging each year.

2. What is the report quarter and when did it end?
- The reported quarter is the first financial quarter of 2023. The quarter ended on April 29, 2023
3. What are the results for the reporting quarter? Please describe in the following order using bullet points - revenue, gross margin, opex, op margin, net income, and EPS. Include both GAAP and non-GAAP numbers. Please also include quarter-over-quarter changes.
4. If a municipality introduces a pay-as-you-throw program as part of its EPR strategy, charging households \$0.05 per pound of collected waste, calculate the cost for a household that generates 30 pounds per week.
5. What's the OP margin for the current quarter?

6. Identify potential risks associated with EPR implementation, such as regulatory changes, market volatility, and technological disruptions. Develop a risk assessment framework that assigns probabilities and impacts to each identified risk factor. Propose risk mitigation strategies for minimizing the adverse effects of these risks on EPR programs and stakeholder interests.
7. What were Gap Inc's net sales for the first quarter of fiscal 2023 and how did they compare to the previous year?
8. How did merchandise margin change from the previous year, and what were the drivers of this change?
9. Did Gap Inc. have an operating profit or loss, and if so, what was the amount?
10. What were the key results from each of Gap Inc.'s brands (Old Navy, Gap, Banana Republic, and Athleta)?
11. What is the company's outlook on net sales for the second quarter and the full fiscal year 2023?
12. How much cash and cash equivalents did Gap, Inc. have at the end of the quarter?
13. How does the company expect gross margin to change in Q2 and the full year compared to 2022?
14. Did Gap Inc. pay a dividend in the first quarter, and what is their dividend strategy going forward?
15. What are the key actions Gap Inc. is taking to execute its plan?