# Task 1 : Comparative Study of LLM Tools

## Introduction

This report presents a comparative study of three Large Language Model (LLM) tools to evaluate their performance across different tasks. The study is designed to test the quality, accuracy, clarity, creativity, and efficiency of responses from different models. The three tools selected for this study are ChatGPT, Google Gemini, and Claude.

## Objective

The primary objective is to compare the output quality from different LLM tools by using the same prompts and recording their performance.

## Tasks and Prompts

The following prompts were tested on all selected LLM tools:

1. Summarize a 500-word article into exactly 5 bullet points.

2. Write Python code to scrape headlines from a news website.

3. Translate a paragraph into Marathi with cultural sensitivity.

## Evaluation Criteria

Each response was assessed based on the following parameters:  
- Response clarity  
- Accuracy  
- Creativity  
- Speed

## Comparison Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prompt | ChatGPT | Google Gemini | Claude | Observations |
| Summarization into 5 bullet points | Clear, concise, good accuracy | Good, slightly verbose | Creative but sometimes less precise | All performed well, ChatGPT most balanced |
| Python code for scraping headlines | Correct, working code with requests + BeautifulSoup | Correct, but used more complex approach | Code clear, but missed some error handling | ChatGPT gave most practical solution |
| Translation to Marathi with cultural sensitivity | Accurate, sensitive translation | Accurate, but less natural phrasing | Culturally nuanced, fluent translation | Claude best for cultural sensitivity, ChatGPT reliable |

## Observations & Conclusion

The comparative analysis shows that each tool has unique strengths. ChatGPT is highly balanced in clarity, accuracy, and usability, making it a reliable choice for both technical and language tasks. Google Gemini demonstrates strong technical capabilities but may provide overly detailed responses. Claude excels in creativity and cultural sensitivity, making it especially strong for translation and nuanced text generation.  
  
Overall, ChatGPT proved to be the most versatile, while Claude stood out in translation tasks.