The following models will be tested against the following prompts in the listed order. Models:

- 1. mistral
- 2. mistral:instruct
- 3. llama3.2
- 4. llama2:7b
- 5. gemma
- 6. llava

## Prompts:

- 1. Add 15 with 17 and 89237.
- 2. Now put the result from the previous prompt to the power of 4.
- 3. Now describe the following website: https://steamdb.info/instantsearch/
- 4. Summarize the content of this: <a href="https://ollama.com/library">https://ollama.com/library</a>
- 5. What is the context of this pdf:
   https://dl8rn0p25nwr6d.cloudfront.net/CIK-0001813756/975b3e9b-2
   68e-4798-a9e4-2a9a7c92dc10.pdf

The llava model will additionally be prompted with images. (llava only accepts the bytes of an image)
Prompts:

- What pose is this stickman in: ☐ Stickman Waving
- What about this one: Stickman Waving Upside Down
- Now describe this image: https://photos.app.goo.gl/gG28eHM1jaR377Nb8

Prompt#	Query Time (ms)	Response
1	602.691	89,265 is the result when you add 15, 17, and 89237 together. I hope this calculation helps! Let me know if you need help with anything else.
2	725.592	2.605696e+17 is the result when you calculate 89,265^4. This large number demonstrates the power that arithmetic operations can have on data. Let me know if you have any questions about this or need help with anything else!
3	1190.048	steamdb.info is a website dedicated to providing statistics, trends, and information related to Steam, an online digital distribution platform for video games developed by Valve Corporation. The "Instant Search" section of the site allows users to quickly search for specific games or developers on Steam using the search bar at the top of the page.  The search results display detailed information about the game, including its price, reviews, daily/weekly active players, and various other statistics. There is also an option to filter the search results by genre, tags, and release date. Overall, steamdb.info is a valuable resource for gamers who want to make informed decisions about which games to purchase on Steam.
4	1549.880	Ollama.com is an online platform that offers a variety of resources for learning and exploring mathematics, physics, computer science, and other related subjects. The "Library" section of the site contains a collection of interactive problem sets, videos, articles, and tutorials on these topics.  The content is organized by subject area, with separate sections for calculus, linear algebra, differential equations, physics, computer science, and more. Each topic has its own set of resources, such as videos explaining concepts, interactive exercises to practice skills, and solutions to problems. The site also offers a forum where users can ask questions and discuss various topics with other members of the community. Overall, Ollama.com is a useful resource for self-directed learners who want to deepen their understanding of mathematical and scientific concepts.
5	1416.890	The context of the provided PDF is a filing made to the U.S. Securities and Exchange Commission (SEC) by a company called "BioNTech SE." The filing, which was submitted on October 30, 2020, is an annual report on Form 20-F for the fiscal year ending December 31, 2019.  The report includes financial statements and detailed information about BioNTech's business operations, including its research and development activities, sales and marketing efforts, and partnerships with other companies. The report also discusses the company's governance structure, risk factors, and key performance indicators. Overall, the context of this PDF is a regulatory filing by BioNTech SE providing financial and operational information about the company to the SEC and investors.

## mistral:instruct

Prompt#	Query Time (ms)	Response
1	1394.685	89,269 is the result of adding 15, 17, and 89237.
2	656.934	1.08239343673e+15 is the result of raising 89,269 (the sum of 15, 17, and 89237) to the power of 4.
3	1719.711	The website <a href="https://steamdb.io/instantsearch/">https://steamdb.io/instantsearch/</a> is a search engine specifically designed for Steam, a digital distribution platform for video games and software. It allows users to quickly find information about various aspects of Steam games such as their prices, popularity, game details, player reviews, and more.  The website has an intuitive interface with a search bar at the top, allowing users to type in the name of the game they are looking for. As users begin typing, it provides suggestions based on games that match what they have entered so far.  When a user clicks on a game, they are taken to a detailed page about that game which includes various information such as its current price, number of players, average review score, and more. The website also allows users to filter results by platform (PC, Mac, Linux) and other factors like price range, release date, and popularity.  Overall, the website is a useful resource for anyone interested in finding and learning about Steam games quickly and easily.
4	1895.901	Ollama ( <a href="https://ollama.com/library">https://ollama.com/library</a> ) is an online platform that offers digital educational resources, particularly in the fields of science, technology, engineering, and mathematics (STEM). Their library includes a wide range of interactive courses, textbooks, tutorials, videos, articles, and other materials designed to help learners at various levels, from beginners to experts. Topics covered on Ollama include coding, data science, machine learning, artificial intelligence, mathematics, physics, biology, chemistry, engineering, robotics, and many more. The courses are often project-based, meaning that students can apply what they learn to real-world projects and problems. In addition to its library of resources, Ollama also offers a community forum where users can ask questions, share ideas, and collaborate on projects with other learners and experts in the field. Overall, Ollama is an excellent resource for anyone looking to learn and improve their skills in STEM fields through online courses, tutorials, and interactive learning materials.
5	1982.682	The context of the PDF document at <a href="https://d18rn0p25nwr6d.cloudfront.net/CIK-0001813756/975b3e9b-268e-4798-a9e4-2a9a7c92dc10.pdf">https://d18rn0p25nwr6d.cloudfront.net/CIK-0001813756/975b3e9b-268e-4798-a9e4-2a9a7c92dc10.pdf</a> is a filing with the U.S. Securities and Exchange Commission (SEC) by a company called GigCapital2 Inc., which is a special purpose acquisition company (SPAC). The PDF document is the company's definitive proxy statement, filed in May 2021, to provide information to its shareholders about an upcoming merger or acquisition.  The filing includes details such as the proposed target company for the merger, the business combination agreement between the two companies, financial statements, risks and uncertainties associated with the transaction, and other important information that shareholders should consider before voting on the proposal. Overall, the context of the PDF is related to corporate finance, securities regulations, and mergers and acquisitions.

Prompt#	Query Time (ms)	Response
1	2035.226	To calculate the sum, I'll add 15 to 17 first: 15 + 17 = 32 Then, I'll add 89237 to that result: 32 + 89237 = 89369 The final answer is: 89369
2	380.292	I'll take the previous result and raise it to the power of 4: 89369 <sup>4</sup> = 7,135,111,441,761
3	1719.432	The website <a href="https://steamdb.info/instantsearch/">https://steamdb.info/instantsearch/</a> appears to be a search engine for SteamDB, a popular online database of information about video games. Upon visiting the page, I see that it's an instant search feature that allows users to quickly find specific game-related data. The interface is simple and minimalistic, with a focus on speed and ease of use. Here are some key features I noticed:  1. Search bar: A prominent search bar at the top of the page where you can type in keywords related to the game, such as its title, developer, publisher, or platform.  2. Instant results: The search engine returns a list of relevant results almost instantly, which is impressive considering the vast amount of data on SteamDB.  3. Data types: The search results include various pieces of information, such as:            Game details (title, release date, genre, etc.)    Platform information (PC, console, mobile, etc.)   System requirements   User reviews and ratings  4. Sorting options: Users can sort the search results by different criteria, like "Newest First" or "Oldest First", which is convenient for finding recently released or older games.  5. No-frills interface: The design of the page is clean and unobtrusive, making it easy to focus on finding what you're looking for.  Overall, this instant search feature seems designed to help users quickly find specific information about video games on SteamDB, which can be a valuable resource for gamers, researchers, or anyone interested in exploring the world of PC gaming.
4	1764.661	The website <a href="https://ollama.com/library">https://ollama.com/library</a> appears to be an online library of manga and anime information. Here's a summary of what I found:  1. Manga Database: The site has a comprehensive database of manga titles, including:

		Linking to External Resources: In some cases, the website links to external resources like MyAnimeList, Anime News Network, or Crunchyroll for additional information.  Overall, Ollama's library appears to be a valuable resource for fans of manga and anime, providing easy access to a vast amount of information on these topics.
5	1557.058	The URL you provided appears to be a public PDF file hosted on a cloud storage platform. Without access to the actual content of the PDF, I can only provide some general context based on the metadata and the location where it's hosted.  The metadata suggests that the document is related to an S-1 filing with the Securities and Exchange Commission (SEC) in the United States. The filename and the hosting domain both hint at this connection.  S-1 filings: An S-1 filing is a type of registration statement filed by companies planning to raise capital through the sale of securities. This document provides detailed information about the company's business, management team, financial condition, and operational plans.  Given the context, it appears that this PDF might be an S-1 filing for a publicly traded company, possibly a startup or a technology firm. The content may include:   Company overview  Management team profiles  Business model and market analysis  Financial projections and historical data  Securities offering details  However, without further information, I couldn't provide more specific details about the company's identity, industry, or the purpose of this S-1 filing. If you need to access or analyze the content of this PDF, I recommend verifying the authenticity of the document through the hosting platform and checking for any updates or revisions.

Prompt#	Query Time (ms)	Response
1	1419.832	Of course, I'd be happy to help! The sum of 15 + 17 is 32, and the sum of 89237 + 15 is 89352. Please let me know if you have any other questions or if there's anything else I can assist you with!
2	535.118	Certainly! The result of the previous calculation is 89352. To the power of 4, that would be:  89352 × 4 = 353408 I hope this helps! Let me know if you have any other questions or if there's anything else I can assist you with.
3	1882.488	Certainly! The website <a href="https://steamdb.info/instantsearch/">https://steamdb.info/instantsearch/</a> is a tool that allows users to search for Steam games and their related information, such as user reviews, sales, and more. The website has a clean and simple interface, with a search bar at the top where users can enter the name of the game they're interested in.  As soon as the user types in the name of the game, the website will display a list of relevant results, including the game's name, cover art, release date, and a short description. The website also provides information on the game's price, user reviews, and the number of players who have purchased it.  One of the unique features of this website is its ability to search for games based on various criteria, such as genre, platform, and price range. Users can select these filters to narrow down their search results and find exactly what they're looking for.  Overall, <a href="https://steamdb.info/instantsearch/">https://steamdb.info/instantsearch/</a> is a useful tool for anyone who wants to quickly and easily find information on Steam games without having to browse through the entire Steam library.
4	1600.110	The website <a href="https://ollama.com/library">https://ollama.com/library</a> is a collection of e-books and other educational resources that are available for free download. The website offers a wide range of topics, including programming, web development, marketing, and more.  The resources on the website are organized into various categories, such as "Beginner," "Intermediate," and "Advanced," to help users find materials that are appropriate for their level of experience and knowledge. Each resource includes a detailed description and a list of keywords to help users quickly identify relevant content.  One of the unique features of this website is its focus on providing resources in multiple formats, including e-books, PDFs, and video tutorials. This allows users to access and learn from the materials in a way that suits their learning style and preferences.  Overall, <a href="https://ollama.com/library">https://ollama.com/library</a> is a valuable resource for anyone looking to expand their knowledge and skills in various areas of interest, without having to pay for expensive courses or books.
5	1544.180	Based on the provided URL, it appears that the PDF document is part of a filing with the Securities and Exchange Commission (SEC) in the United States. The URL includes the string "d18rn0p25nwr6d.cloudfront.net", which is Amazon Web Services' storage service for filings with the SEC. The document's title is "Form 8-K" and it appears to be a quarterly report filed by a company named "Qumu Corporation" (the company listed in the URL). The document provides information on the company's financial performance, management changes, and other significant events that occurred during the period covered by the report.  Therefore, the context of this PDF document is likely related to corporate governance and compliance with SEC regulations for publicly traded companies in the United States.

## gemma

Prompt#	Query Time (ms)	Response
1	2737.850	15 + 17 + 89237 = 89269
2	333.228	I do not have access to past conversations or results. Therefore, I am unable to provide the result of the previous prompt or perform mathematical calculations beyond the scope of my current abilities.
3	627.872	I am unable to access external information or browse the internet. Therefore, I am unable to provide any information or description regarding the website you mentioned.
4	581.687	I am unable to access external information or browse the internet. Therefore, I am unable to provide any information or summary regarding the webpage you mentioned.
5	452.638	I am unable to access external information or browse the internet. Therefore, I am unable to provide any information or context regarding the PDF you mentioned.

Prompt#	Query Time (ms)	Response	
1	3185.736	Sure, here's the calculation: 15 + 17 = 32 32 + 89237 = 89269 Therefore, adding 15 to 17 and then adding that sum to 89237 results in 89269.	
2	577.655	Sure, here's the calculation: (89269)^4 = 500781944 Therefore, 89269 to the power of 4 is equal to 500781944.	
3	1644.633	The website <a href="https://steamdb.info/instantsearch/">https://steamdb.info/instantsearch/</a> appears to be a search engine specifically designed for the Steam community, which is a popular platform for video games and digital content. The domain "steamdbf.info" suggests that the site may be associated with or inspired by Steam Database (SteamDB), a well-known database of information about games on the Steam platform. The search engine provides an instant search feature, allowing users to quickly find specific games or other items within the Steam store. Users can enter keywords, game titles, or other search criteria into the search bar and receive instant results without having to wait for a full search query to complete. It's important to note that this website may not be officially affiliated with or endorsed by Valve Corporation, the company behind Steam. However, it seems to be a useful tool for the Steam community, providing an alternative or supplementary way to search for games and other content on the platform.	
4	1489.982	Ollamä is a library management system that helps users track their personal book collection or shared resources in a group setting. The website provides tools for adding new books, searching for specific titles, and sorting and filtering the collection based on various criteria such as author, genre, or publication date.  Users can also create groups to share their collections with others, making it easy to collaborate and compare notes on shared resources. Ollamä also provides a social aspect, allowing users to follow other users' collections and receive notifications when new books are added or updated.  Overall, Ollamä is a useful tool for individuals who want to keep track of their book collection or for groups looking to manage shared resources. The website offers a clean and user-friendly interface, with features such as instant search and group collaboration making it easy to use and navigate.	
5	1853.249	The PDF document you provided appears to be a registration statement filed with the Securities and Exchange Commission (SEC) by a company named Zomedica Inc. on February 25, 2021.  The purpose of this registration statement is to provide information about the terms and conditions of the proposed sale of up to \$6,000,000 in common stock and warrants. This offering would be made pursuant to an effective shelf registration statement previously filed with the SEC on May 29, 2019.  The document provides detailed information about the terms of the proposed offering, including the price per share of common stock, the exercise price of the warrants, and other important details about the offering. It also includes risk factors that potential investors should consider before investing in the company's securities.  It's worth noting that this registration statement is just one component of a larger process for raising capital through the sale of securities. The SEC reviews and approves such registration statements to ensure that companies providing information to potential investors do so in an accurate, transparent, and compliant manner.	
prompts with	prompts with images below		
6	799.770	The stickman appears to be in an upright standing position, with one arm raised and the other at its side. It does not seem to be performing any specific action or posture but could be interpreted as if it's waving or signaling.	

7	964.829	This image shows a stick figure drawn in black on what appears to be a computer screen displaying a blue background. The stick figure seems to be positioned with one arm raised and the other at its side, possibly indicating a wave or a signal of some sort. It's a simple drawing that could represent someone standing in front of a backdrop, perhaps for a presentation or a video call.
8	1722.548	The image is a photograph taken from a distance that shows a rugged landscape dominated by a large rock formation with various hues and layers of rock, indicative of geological activity over time. The central part of the rock formation exhibits patches of blue pigment or similar substance on its surface, which stands out against the other colored rocks. In the foreground, there is a simple black line drawing of a stick figure with one arm raised, suggesting movement or communication. The background features an expansive desert-like environment under a clear sky, with only minimal vegetation and no signs of human presence or activity. There are no texts present in the image.

The models' performance on the first two queries varied. Some were able to add 15, 17, and 89237 (which is 89269). The incorrect models were off by at most a little under 200.

The models were all incorrect for the second query. The correct answer is 63,504,233,607,700,918,321. All of the models were off by a large margin regardless of their answer in the first query.

The models all responded with satisfactory answers to the third query. The larger models made longer more descriptive responses while the smaller models made shorter ones.

In contrast to the previous answers. Every model provided a wildly incorrect answer. Each one seemed to think that <a href="https://ollama.com/library">https://ollama.com/library</a> is a link to a public library's website or online learning platform. This is likely due to the fact that "library" is in the link. Ilama3.2 was wrong in a different way. It seemed to think that the website was about anime and manga. This is likely due to the ollama logo at the top of the page

Every model except for gemma was able to discern that the provided pdf was about the United States Securities and Exchange Commission. However, they could not agree on the precise content of the file. Some models did not seem read into the pdf while others made guesses.

llava was able to describe the 3 images I provided. It described the first quite simply. It provided a more elaborate description for the last 2 images.