At the apex of computational power, we find the supercomputer. Boasting the ability to perform billions and trillions of complex calculations on data stored in memory. It is the powerhouse of data-intensive scientific and engineering tasks. Its primary purpose lies in executing complex simulations, making it a vital tool for cutting-edge research and computations.

Next in line is the mainframe. A mainframe is a powerful computer that can process and store large amounts of data. It supports multiple users and simultaneous processes. Performance of Mainframes are slower, because of asynchronous calculations. Mainframe serves as the backbone for large-scale data handling in critical industries like finance and enterprise. Some companies like mainframes because they are reliable, secure and easy to maintain, but others have no choice.

Descending in power but maintaining significant capabilities, we encounter the server. A server is a computer system that performs network functions and provides resources, services, or data to clients over a network. Currently, distributed systems are used on servers. Servers facilitate data exchange between network users. The user can communicate with the server using various protocols, for example: http, grpc.

Transitioning further down the hierarchy brings us to the desktop computer. Stationary in nature, it finds its place on a desk, equipped with a CPU, monitor, keyboard, mouse, and system unit. This personal computing powerhouse caters to general tasks such as document creation, internet browsing, and software applications, serving as the cornerstone of day-to-day computing for individuals.

Moving towards mobility, we encounter the laptop. Compact and lightweight, it can work as fast as a desktop PC, with similar processors, memory capacity, and disk drives. Featuring a smaller screen and a touchpad for navigation, it grants users the freedom to work on the go. With various connectivity options and a built-in battery, the laptop marries power and portability.

Lastly, we arrive at the tablet, a highly portable PC whose primary interface is a touch screen that occupies the full length/width of the device. The touch screen display is operated by navigate executed by finger or digital pen (stylus), instead of the mouse, trackpad and keyboard of larger computers, because they don’t have physical keyboard. Blending elements of smartphones and laptops, it sacrifices some hardware components found in traditional computers. Despite this, tablets excel in versatility, catering to a wide range of tasks, from multimedia consumption to communication.