David D. Clark wrote this paper in which he explains TCP/IP, which was first suggested by DARPA in the 1970s and is extensively used in both the military and the private sector. However, he also analyzes the reasons for the creation of the Internet protocol suite. Other connection suites have benefited from these concepts created for IP to create setups that are primarily connectionless. Creating a method for using current networks was the objective. A different option was to create a system with a merged system that would have several transmission mediums, resulting in higher integration and performance. As we saw in the prior research, centralized control might result in catastrophic failures, thus it wasn't necessary. As a result, an IP-based approach to packet switching was suggested, with intermediate routers verifying that the received packet is error-free before retransmitting it. Other purposes, like security and scalability, are significant but are not listed throughout the author's list of the seven goals that are essential for the Internet architecture. Security is crucial because, in today's society, sensitive information like bank account numbers and passwords is used often and has to be kept safe. A priority list is necessary to identify which goals must be accomplished first since it is extremely challenging to complete all of the goals because some will remain unfulfilled. The most suitable target is survivability, which calls for the capacity of communication entities to maintain high-level connections even if the network fails. Replicating the data at each intermediary node is an expensive and challenging option. The optimum option, referred to as fate sharing, is to store states at the end nodes, making sure that only end hosts are aware of the states. It was believed that TCP would support a variety of services adequately on its own. However, TCP utilizes a dependable data stream, whereas when using zoom we do not want dependable packet delivery because if one packet doesn't arrive one will have to wait for it to arrive and the speaker on zoom might have reached ahead in his speech and I would have been left with a significant gap. This resulted in the split of TCP and IP, with IP serving as the building block for various services and TCP being utilized for reliable data transport. For the largest possible audience to utilize it, it should support a wide range of technologies. The other objectives are secondary to those at the top and may or may not be accomplished. Since there are only a few ways to implement routing in huge networks while taking into account certain limitations, distributed management is particularly challenging to do. Additionally, it is not cost-effective because the header is lengthy and sometimes there is just one character to transmit, wasting a large number of resources. Because it raises the price, retransmission is also inefficient. Because they enable connectionless network transfer, datagrams are crucial. For a variety of reasons outlined by TCP's designers, the acknowledgement is delivered after each byte rather than after a packet in TCP. We were able to accomplish some of our larger objectives thanks to datagrams, but some of the more modest objectives proved to be beyond the capabilities of datagrams, suggesting that there may be an alternative. Since the flow states must be saved in the gateways, the terms "soft state" and "hard state" are used to describe how the flow states should be updated. The soft state refers to frequent refreshes at set intervals, while the hard state only updates when a change occurs.