The majority of the traffic for content distribution on the internet is carried via peer-to-peer networks. Understanding peer-to-peer protocols and the elements that influence their effectiveness, therefore, becomes crucial. In this essay, BitTorrent, a popular peer-to-peer distribution mechanism, is studied. We also examine BitTorrent's choking mechanism, which offers each peer the same level of service. To enhance the overall system capacity, the BitTorrent protocol will make use of each node's upload capability. Before being distributed, the material is first divided into parts, and when a peer wishes to join the torrent, it must first obtain the metafile before contacting other peers and requesting various bits of the data. It only runs in Leecher once every ten seconds. The tracker will be used by the leecher to determine which other peers are downloading the same file after it has first found the torrent file. The portion of the file that the leecher has downloaded can now be utilized as a source by other downloaders. Thus, after a leecher gets the complete file and assembles it appropriately, each one will ultimately turn into a seed independently. The choking mechanism, a crucial component of the system, prevents network congestion and free downloaders who just operate as leechers rather than seeds. In the case of leechers, the time difference is often adjusted at 10 seconds to prevent frequent choking and unchoking. The number of concurrent uploads is likewise limited. The sole distinction between seed-state choking and leecher-state choking is that seed-state choking is depending on the pace of data transfer from the seed. Private torrents are the subject of experiments in this study because they let us watch the behavior and record it. No peer was able to alter the upload bandwidth throughout this testing. The experiment was carried out using the two class, three class, and uniform increase setups. According to the report, peers are expected to establish groups depending on their individual upload capacity. Peers have been shown to frequently free up their classmates' peers. This indicates that they favor a peer that has a similar upload capability to themselves. In contrast to quick peers, slow peers sometimes take a long time to download and need to do many more unchokes. By giving peers who contribute quicker download speeds, BitTorrent offers strong incentives. It is possible to free ride, however they often receive extremely low download rates, therefore it may be assumed that BitTorrent forbids free riding. Great usage rates are provided by this choke mechanism in combination with the rarest initial piece selection. When the starting phase is in progress, only low usage is seen, which causes it to predominate the download time. Regardless of speed, leechers are consistently released from choking. When a high-speed peer has finished downloading, the seed will simply spread its bandwidth among the other peers to let them finish the job. There is no preference to unclog peers in any class when the initial seed is not provided. We infer that global upload consumption is relatively high when first seed is inadequately supplied. Only clients that do not attempt to adjust their speed in accordance with utility functions are included in the paper's experiment. The findings of this research validate three previously unknown features. The report described a suggested tracker protocol update that solves a noted protocol restriction and provided guidance for content producers about seed delivery.