Abstract—In a line with the noteworthy growth of the networks (e.g., networks properties and features,) the design of the network become more complex and maybe we cannot achieve these properties and features with the traditional architecture of the networks (e.g., architecture of dedicated monolithic routers and switches that implement both data and control plane.) In some cases, we need to take more complex decisions for routing process and security and managing the network flow and prevent some of the undesirable issues, with relying on the old architecture of the networks we can’t do these decisions. The way we can go through to make these properties of the network easy to achieve is making a change in the ordinary network architecture, making it (the architecture) easier to be configured and be modified and by the way enhance its performance. Making use of the SDN (software defined network) is a great way to get benefit of the desired features of the expected and desired network architecture. SDN is a very rising architecture in today’s networks that is been adapted by a very influential technical institution (e.g., Google that uses SDN to manage the data center from inside and between data centers from outside).