Based on the idea that all ASs establish their export policies in accordance with the selective export rule, the author of the study demonstrated that the AS path in any BGP routing table entry is valley-free. However, in practice, not all ASs abide by this export policy. As a result, not every AS route is valley-free. Additionally, as the author noted in the research, the best supplier may not always have the greatest degree. It is highly challenging to determine AS connections properly due to these flaws and the fact that the BGP data gathered by the route-view project only provides a partial picture of the Internet. But if we approached the provided BGP data from a different angle, we could discover some intriguing findings.

The data that represents the Internet's BGP routing is available first. Second, we are aware that all inter-domain routing ought to be valley free in an ideal world. As a result, we may examine the BGP data to find non-valley-free BGP pathways that go against the established export policy. We want to know specifically how many non-valley-free BGP routes are present in the current Internet. How many non-valley-free BGP pathways, for instance, were published over a specific time frame? How many of the total BGP routes do they take? Additionally, we are interested in learning what factors (intentional or brought on by misconfigurations) lead to these infractions. Exists a concealed pattern of infractions that are frequently committed? What are these infractions' sources of ASs? We may also assess how these infractions affect Internet routing in more detail. These questions have applications for several parties with various interests.

To reduce such infractions, routing policy makers might impose extra regulations. Better techniques for identifying and stopping such infractions can be created by researchers and organizations. Inter-domain routing protocols can be created or enhanced by researchers and organizations to stop the production or propagation of such non-valley-free BGP pathways. ISPs can make better contractual plans for the future. To get the answers to these concerns, we must devise methods for identifying BGP pathways from the gathered BGP data that are not valley-free. Determine if a BGP path is on a peer-to-peer edge or a customer-to-provider edge if it is not valley-free. Create a technique to assess the effects of these infractions. Develop methods to prevent such violations

We should be able to utilize the inferred AS correlations suggested by the research to check our results, which is another point worth addressing.