Programmable Data Plane Using P4 Language

GitHub link for our project is below.
https://github.com/ganeshkurapati/Programmable-Data-Plane-using-P4-Language

The project implementation was team effort with everyone in the team putting in their efforts. A summary of contributions is given below.

1. Contributions of **Naga Ganesh**
    - Contributed towards literature study of P4 language.
    - Parser logic implementation.
    - Implemented identification of video streams from a streaming server.
    - Installation of Mist server and perform video streaming to VLC video player.
    - Match action table to identify and filter streaming packets.
    - Contributed towards documentation and project report.

2. Contributions of **Ramanand Shankarling**
    - Contributed towards literature study of P4 language.
    - Linux environment set up with Mininet, installation of P4 compiler and other tools.
    - Implemented identification of OpenSSL flows.
    - Captured packets for SSL connection between sample SSL client and SSL server. Modify using Tcprewrite and replay with Scapy.
    - Match action table to identify and filter SSL packets.
    - Contributed towards documentation and project report.

3. Contributions of **Rakesh Musalay**
    - Contributed towards literature study of P4 language.
    - Counter logic.
    - Implemented identification of Youtube streams.
    - Capturing of QUIC protocol streams using Wireshark and replay with Scapy.
    - Match action table to identify and filter Youtube QUIC packets.
    - Contributed towards documentation and project report.