

```

BEGIN {
    sent = 0
    recv = 0
    drop = 0

    data_sent = 0
    data_recv = 0
    data_drop = 0

    ack_sent = 0
    ack_recv = 0
    ack_drop = 0
}

{
    event = $1    # s, r, d
    time = $2
    from = $3
    to = $4
    pkt_type = $5
    pkt_size = $6
    flow_id = $8  # fid_
}

# ----- COUNT TOTAL EVENTS -----
event == "s" { sent++ }
event == "r" { recv++ }
event == "d" { drop++ }

# ----- DATA FLOW (fid = 1) -----
event == "s" && flow_id == 1 { data_sent++ }
event == "r" && flow_id == 1 { data_recv++ }
event == "d" && flow_id == 1 { data_drop++ }

```

```

# ----- ACK FLOW (fid = 2) -----
event == "s" && flow_id == 2 { ack_sent++ }
event == "r" && flow_id == 2 { ack_recv++ }
event == "d" && flow_id == 2 { ack_drop++ }

END {
    print "====="
    print " NS-2 TRACE SUMMARY"
    print "====="

    print "\n--- Overall Statistics ---"
    print "Total Packets Sent : " sent
    print "Total Packets Received : " recv
    print "Total Packets Dropped : " drop

    print "\n--- Data Packets (fid = 1) ---"
    print "Data Sent : " data_sent
    print "Data Received : " data_recv
    print "Data Dropped : " data_drop

    print "\n--- ACK Packets (fid = 2) ---"
    print "ACK Sent : " ack_sent
    print "ACK Received : " ack_recv
    print "ACK Dropped : " ack_drop

    print "\n====="
}


```