**Assignment 3**

**Sliding Window**

**By: Prerna (306), Pranjal Mathur (296), Vishal Gauba (501), Saketh Vallakatla (352)**

**1. Evaluate the correctness of your implementation: send a few large files from a server to a client preferably connected over a wireless link. Compare the size of sent and received files.**

**Tested on various file formats of different size.**

**Default TimeOut**: 30ms

|  |  |  |
| --- | --- | --- |
| File Type | Actual Size | Received Size |
| .mp3 | 9883 KB | 9883 KB |
| .mp4 | 15937 KB | 15937 KB |
| .avi | 712568 KB | 712568 KB |

**Timeout for a packet vs Retransmitted Packets by Server (due to loss of acknowledgement /Packet loss) and Duplicate Packets received by client.**

**File Format : .**mp4 **Number of Packets:** 404

|  |  |  |  |
| --- | --- | --- | --- |
| Timeout  (in ms) | Number of Unique Packets Send/Received | Retransmitted Packet  By Server | Duplicate Packets received by client |
| 100 | 404 | 0 | 0 |
| 80 | 404 | 0 | 0 |
| 50 | 404 | 0 | 0 |
| 20 | 404 | 2 | 1 |
| 15 | 404 | 33 | 31 |
| 10 | 404 | 315 | 212 |
| 8 | 404 | 483 | 235 |
| 5 | 404 | 847 | 257 |
| 3 | 404 | 1350 | 288 |

**Plots based on Recorded observation 1) Timeouts vs Retransmitted Packets and 2) Timeouts vs Duplicate Packets**

**2. Vary SWS (keeping RWS = SWS) and plot the measured data rate against SWS.**