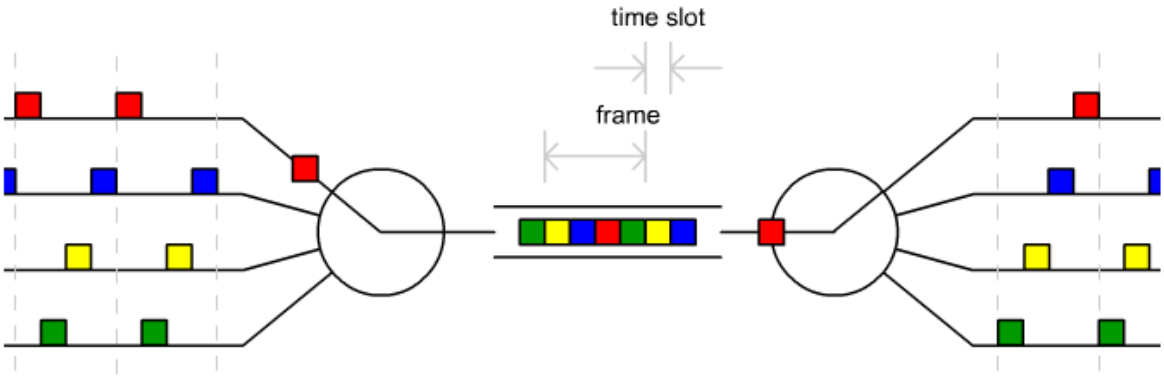
Lab Experiment 4

CSE 3112- Data and Telecommunications Lab

Emulation of Sync-TDM and Stat-TDM

Problem Description

This experiment emulates Synchronous Time Division Multiplexing (Sync-TDM) and Statistical Time Division Multiplexing (Stat-TDM). Consider two different traffic models: *backlogged traffic model*, where data values are always available from n input files and *Random process model,* where the presence of traffic from a particular file is random.



Consider that n = 5 (5 files with different sizes, should need more than five individual slots to send an entire file), length of a timeslot T = 50ms and bit rate B = 50 Mbps. Now, implement the following:

(i) Sync-TDM with backlogged traffic model

(ii) Stat – TDM with random traffic model

For all the cases, your MULTIPLEXER program and DEMULTIPLEXER program will run on different machines.