



Midterm#3

- Write a two programs, the *receiver* and the *sender*, which both:
 - access a shared memory segment
 - coordinate by means of SYSV semaphores
 - implement the “producer-consumer” paradigm



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- The *receiver*:
 - Opens a stream socket on port 53333
 - Waits for incoming connections from clients
 - Receives fixed sized packets (e.g. 1KB) from clients
 - Stores them in the shared memory buffer



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- The *sender*:
 - Opens a stream socket on port 53334
 - Waits for incoming connections from clients
 - Retrieves fixed sized packets (e.g. 1KB) from shared memory buffer
 - Sends them to clients

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- You can use the provided clients (csend.c and crecv.c) to test your implementation.
- They:
 - Take a single cmdline argument (the number of packets to send/receive)
 - Perform some trivial checks on message contents
 - Are **not** guaranteed to be bug-free 😊
- Optional: test with multiple *concurrent* clients

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- Example:

```
$ cc -o csend csend.c
```

```
$ cc -o crecv crecv.c
```

```
$ ...(start your programs) ...
```

```
$ ./crecv 1000 &
```

```
$ ./csend 1000
```