

Collective Communication with Distributed Memory

CS 5/4473 Parallel Distributed and Network Programming

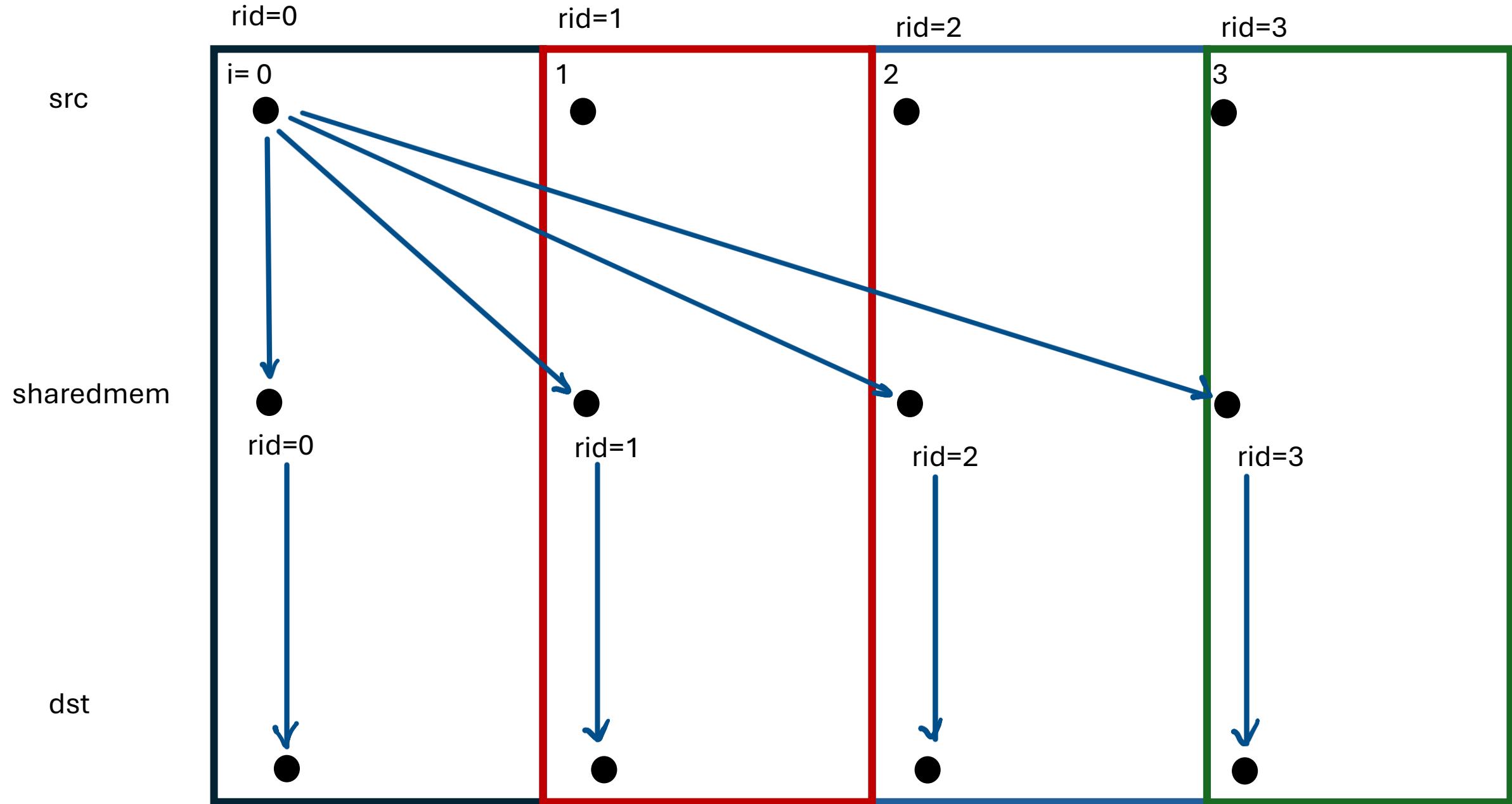
Dr. Richard Veras

Joy Mosisa

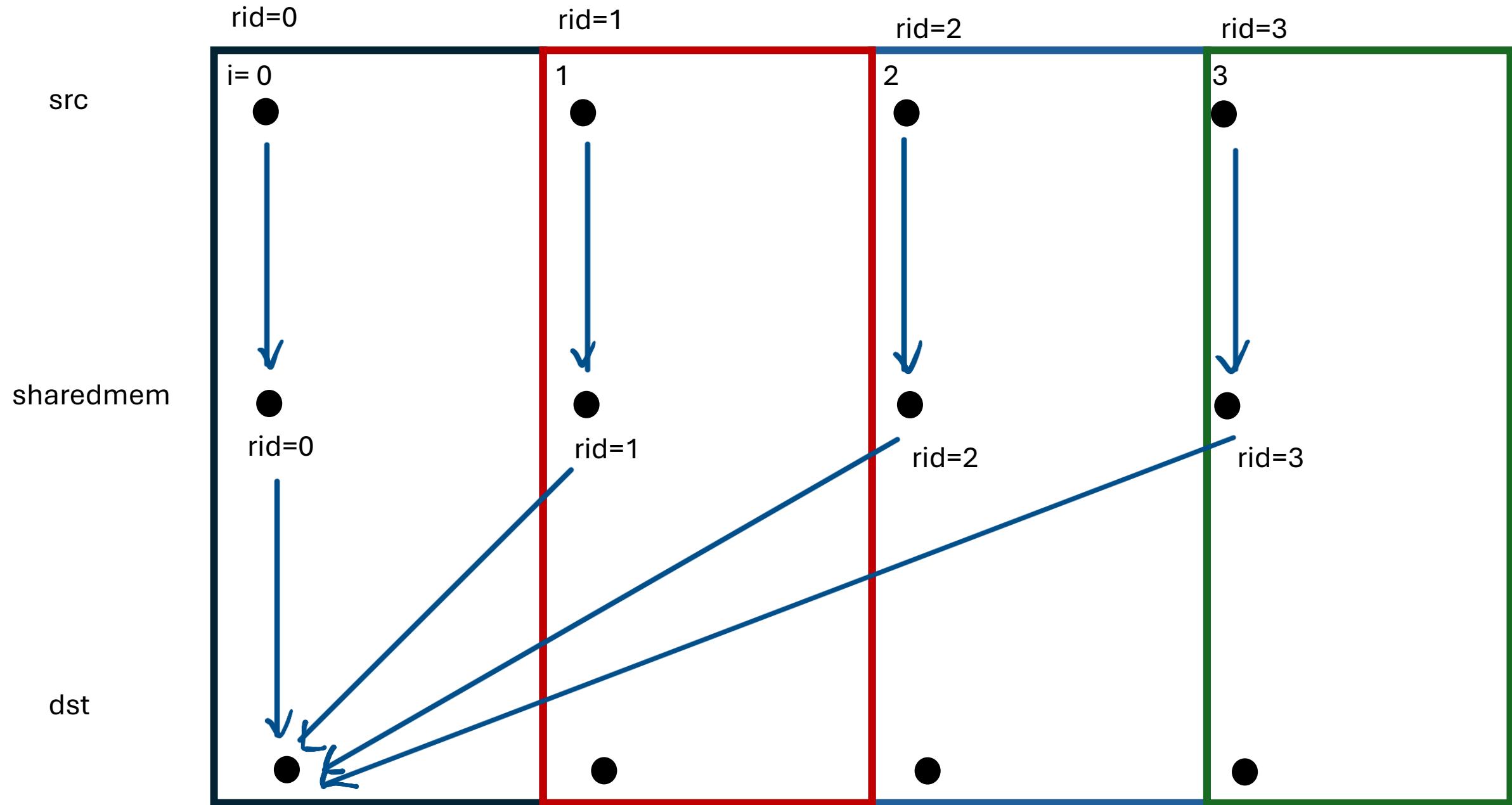
Instructions

- For each problem in the code (XX.Z) draw the data movement (add all of the arrows) between:
 - src --> shared_mem --> dst
- You can use this template, but you are not required to use it.
- rid is tid here
- Assume root_rid=0

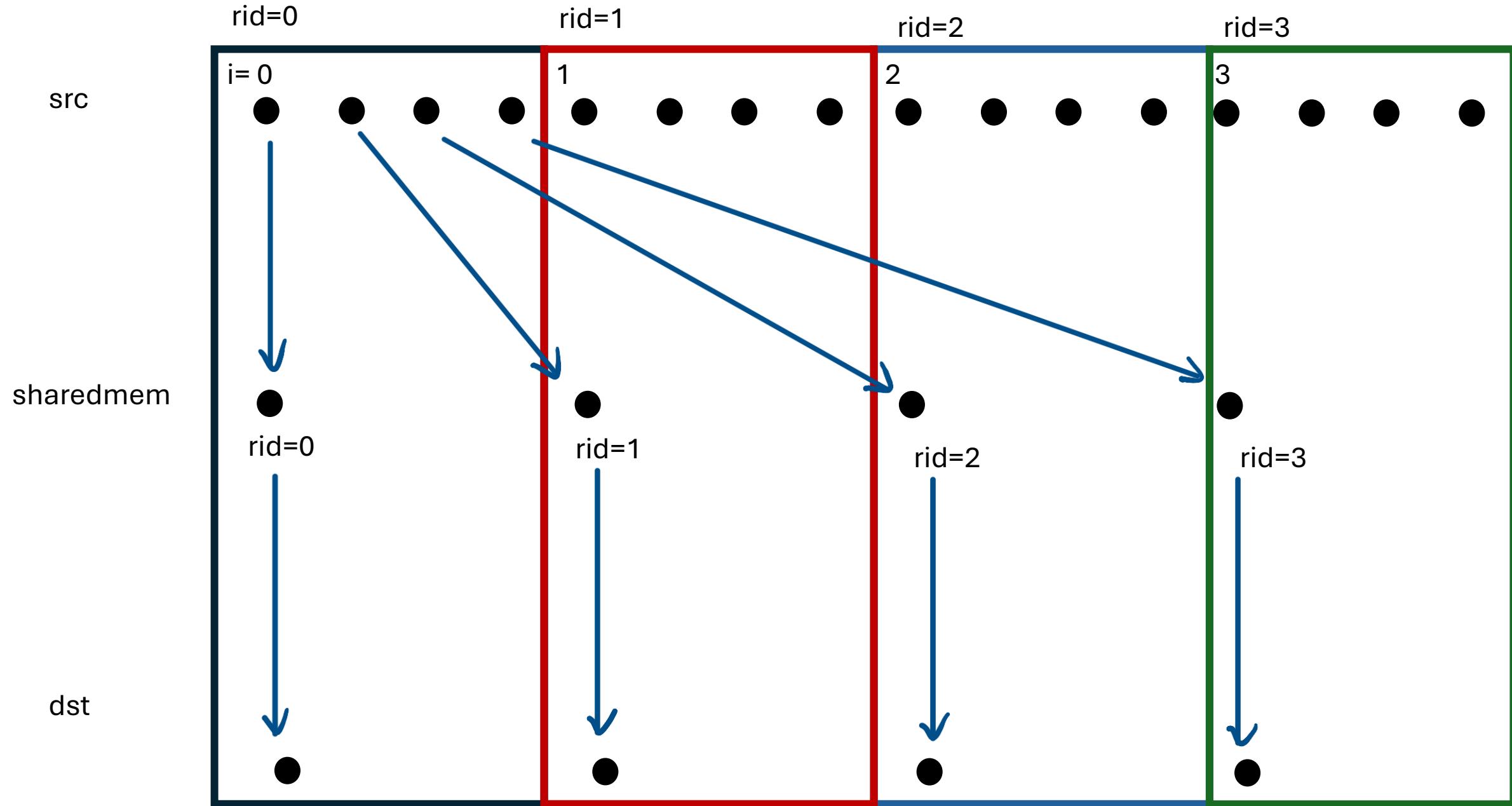
Prob 01: Broadcast



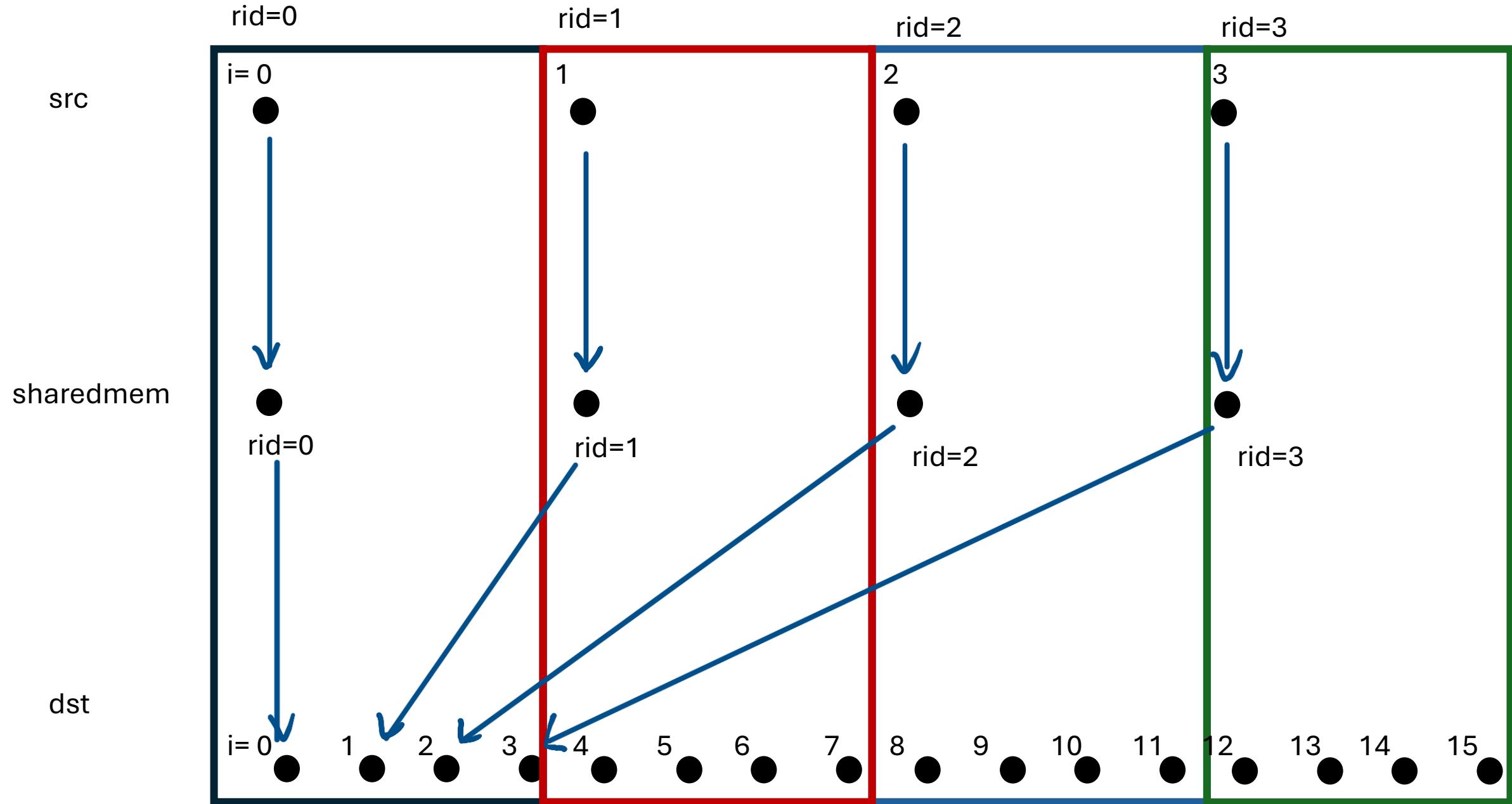
Prob 02: Reduce



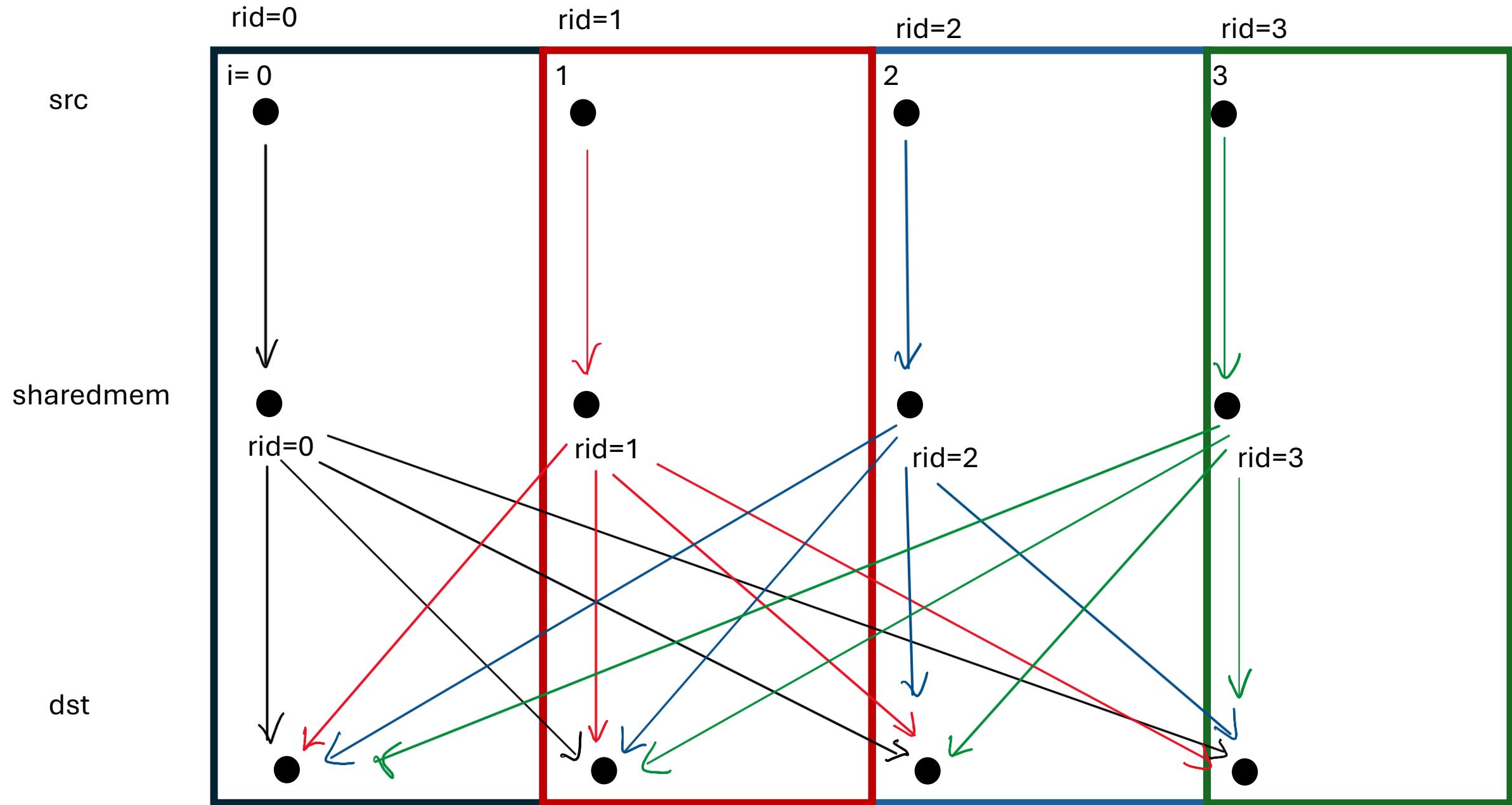
Prob 03: Scatter



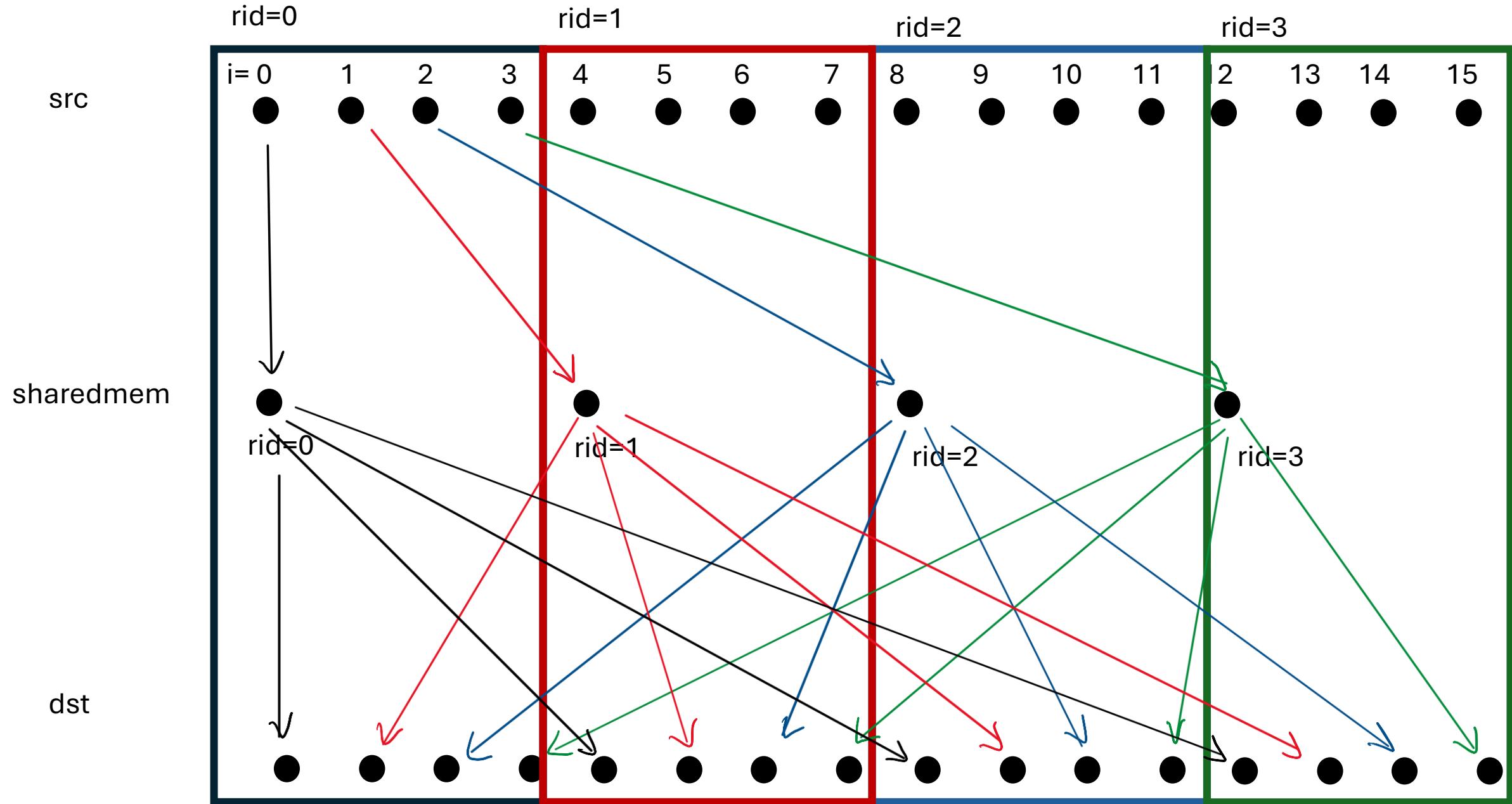
Prob 04: Gather



Prob 05: All Reduce



Prob 06: All Gather



Prob 07: All to All

