

# Collective Communication with Shared Memory

CS 5/4473 Parallel Distributed and Network Programming

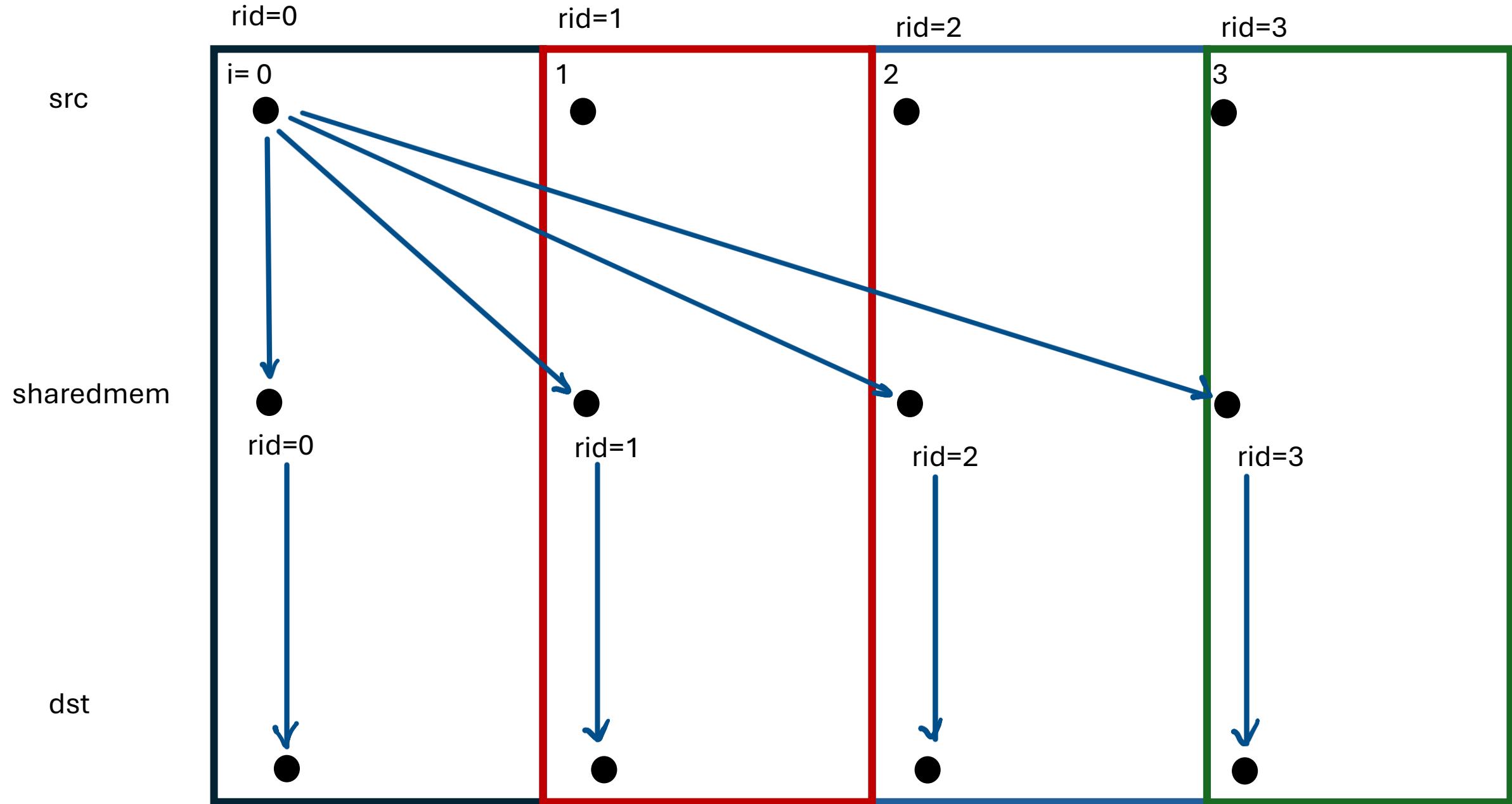
Dr. Richard Veras

Joy Mosisa

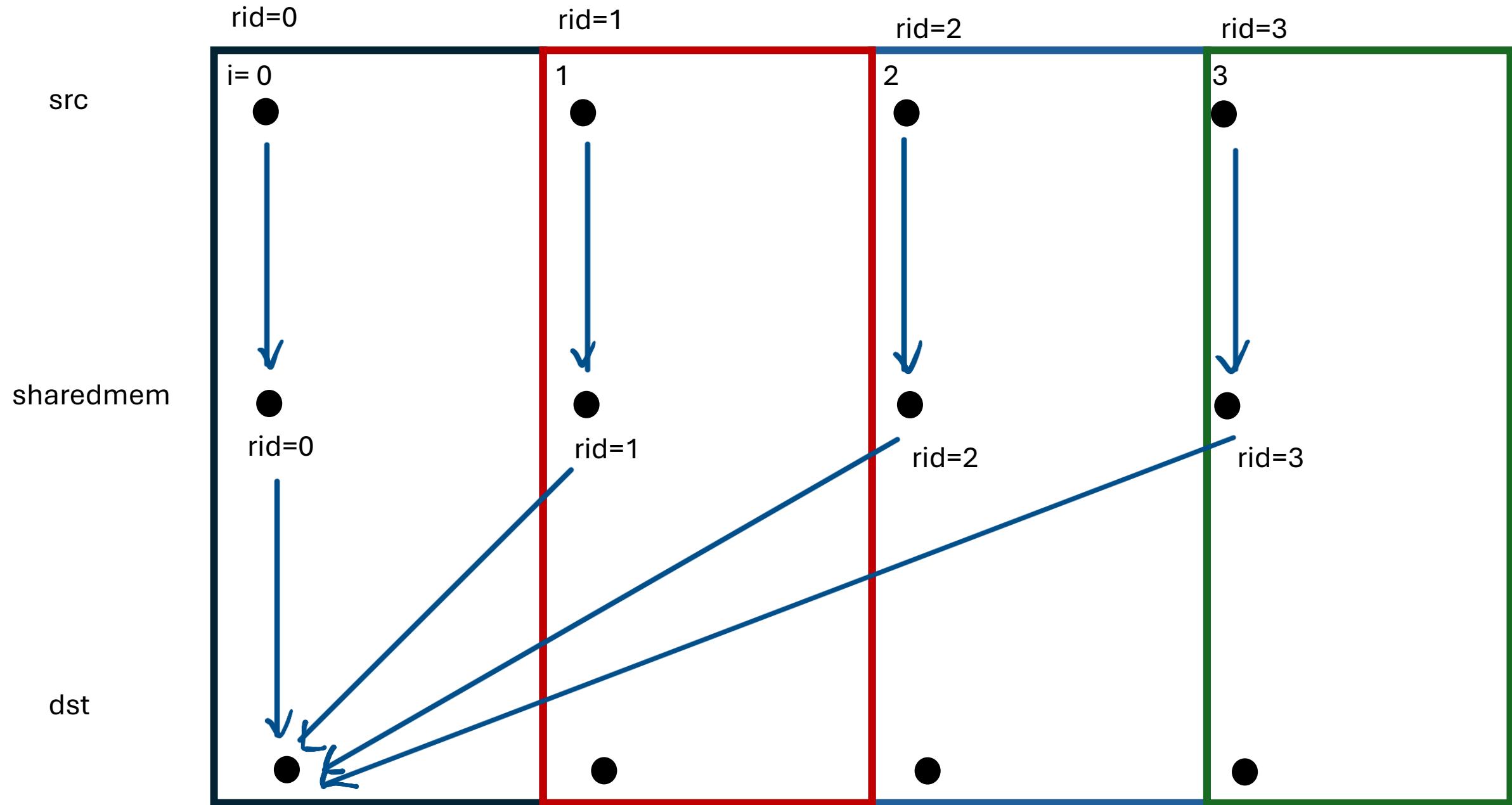
# Instructions

- 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

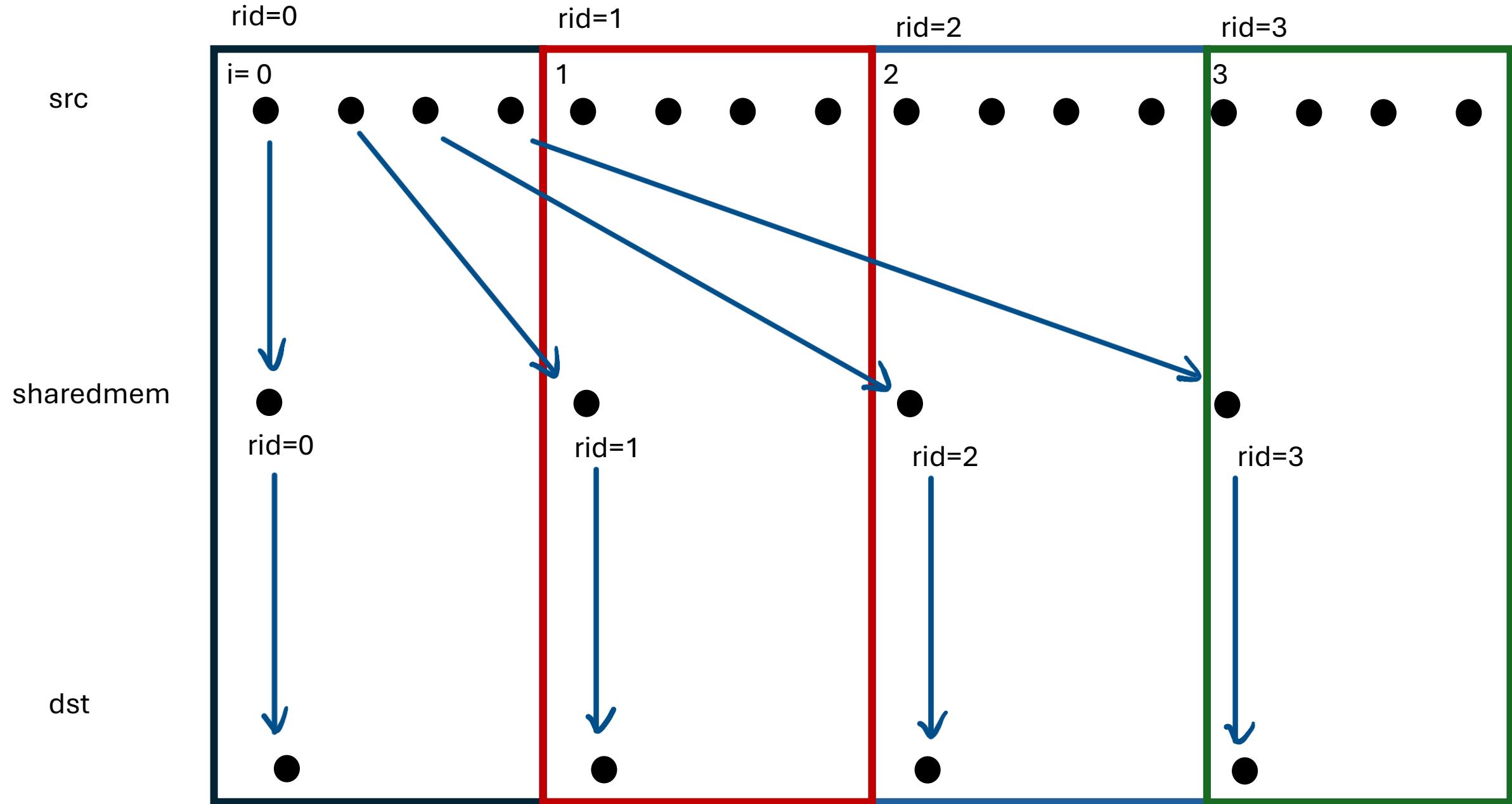
# Prob 01: Broadcast



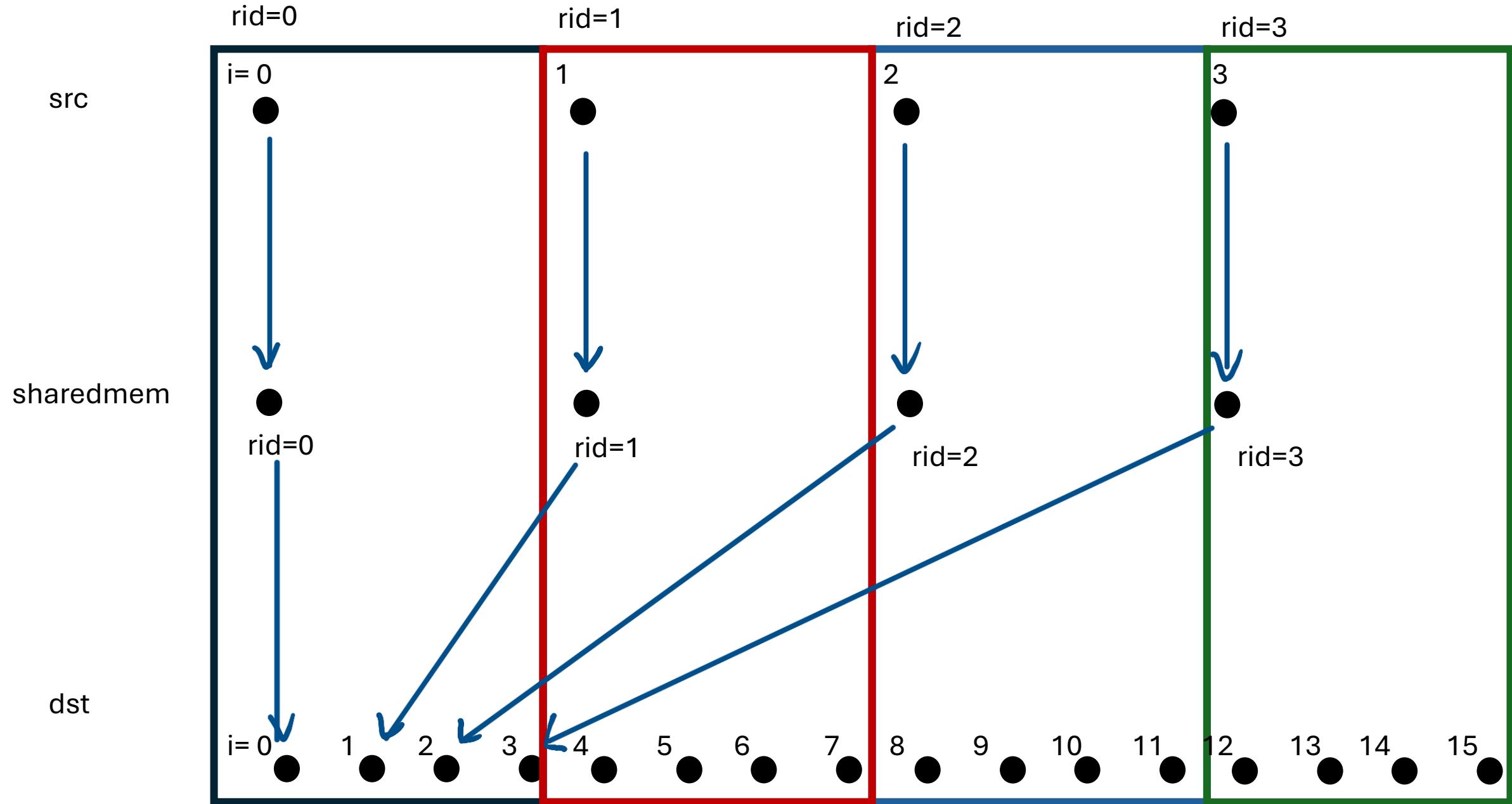
## Prob 02: Reduce



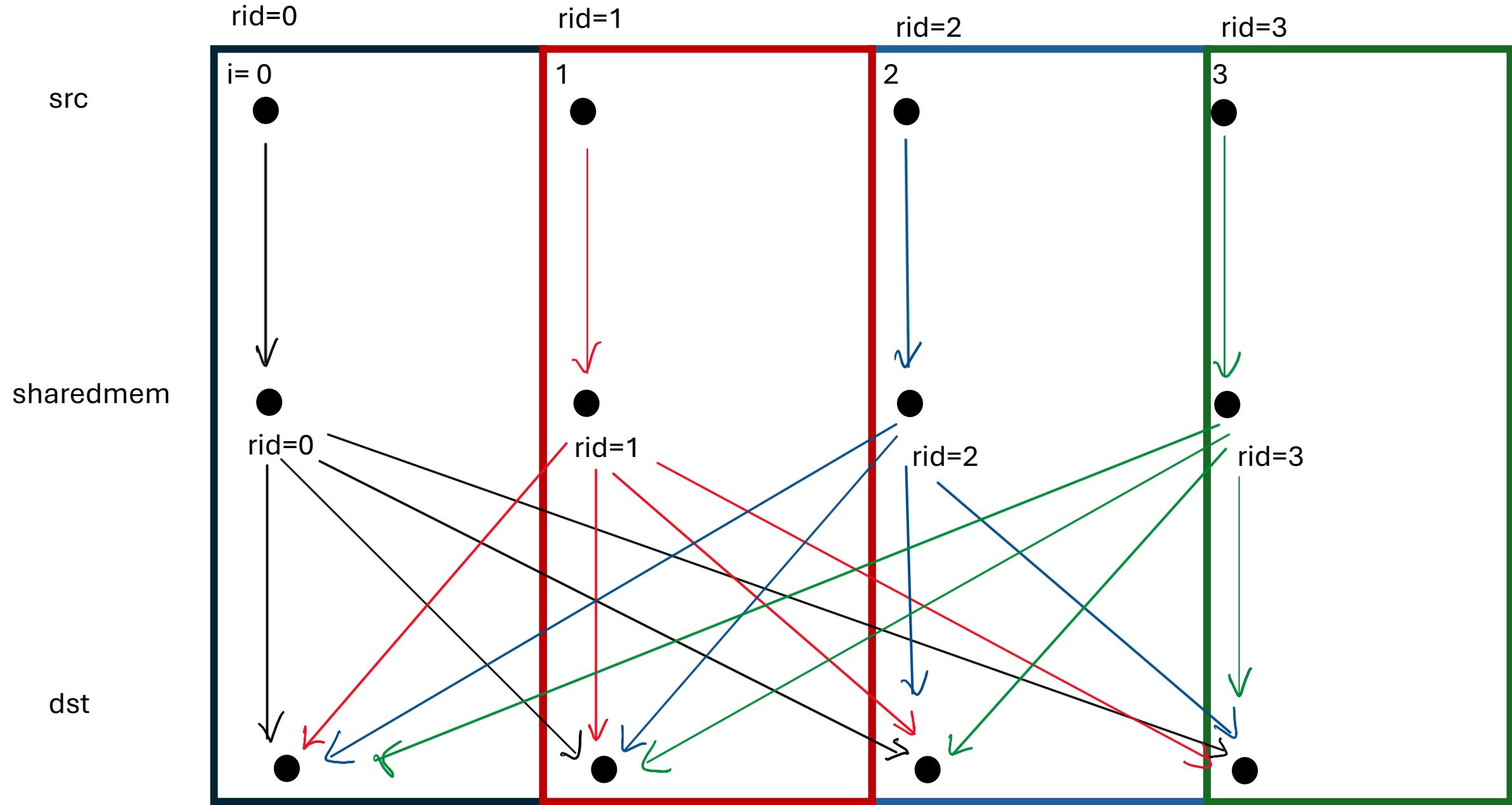
# Prob 03: Scatter



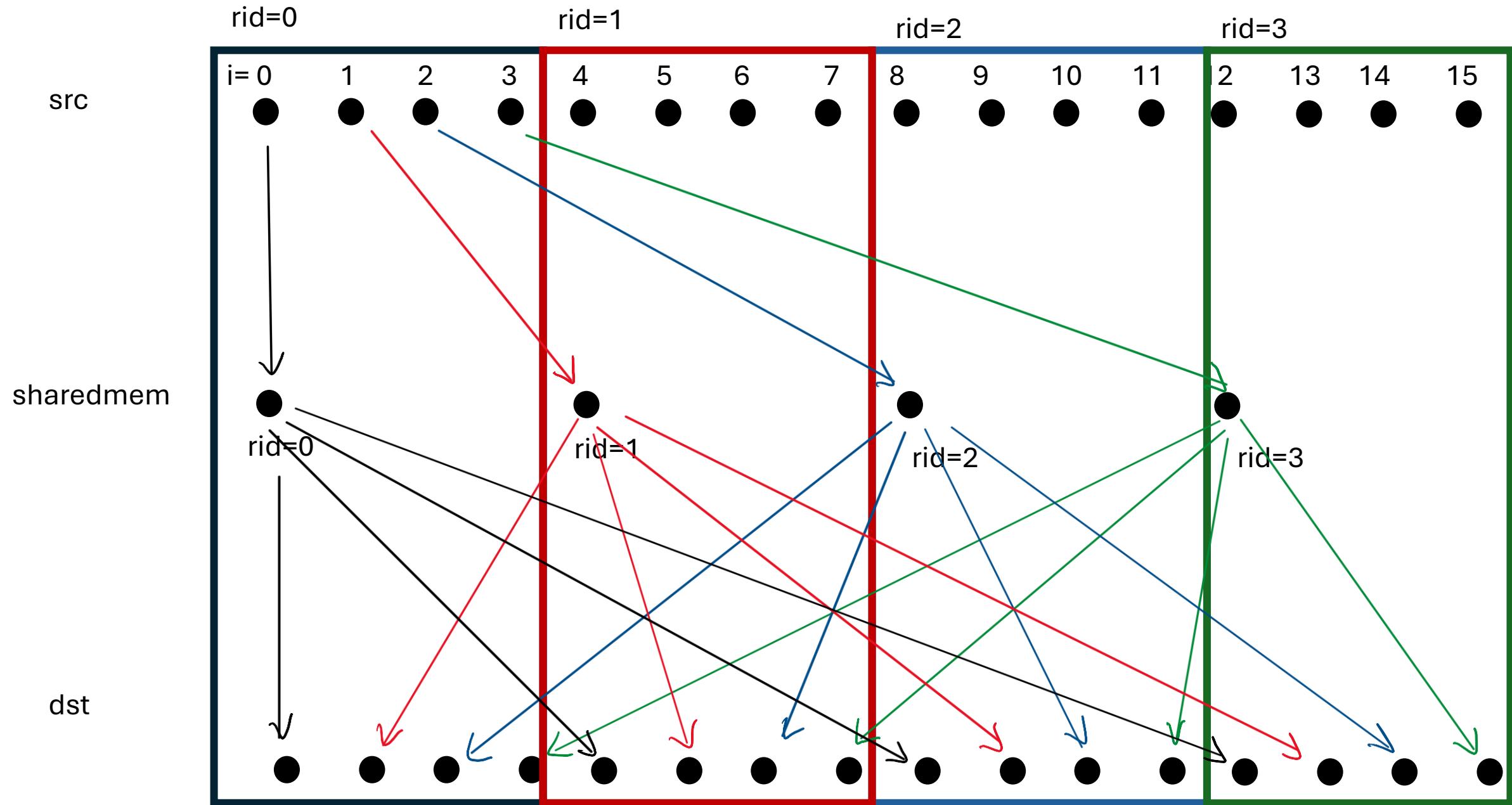
# Prob 04: Gather



# Prob 05: All Reduce



# Prob 06: All Gather



# Prob 07: All to All

