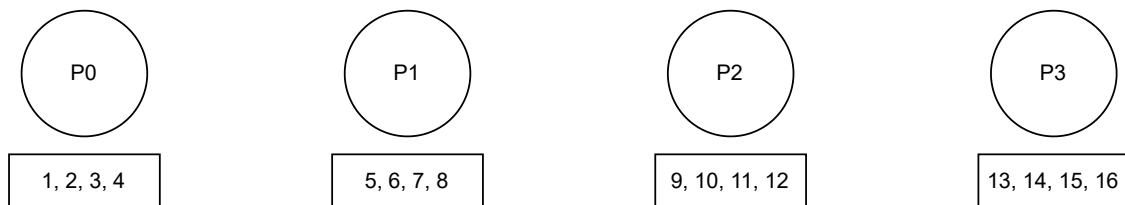


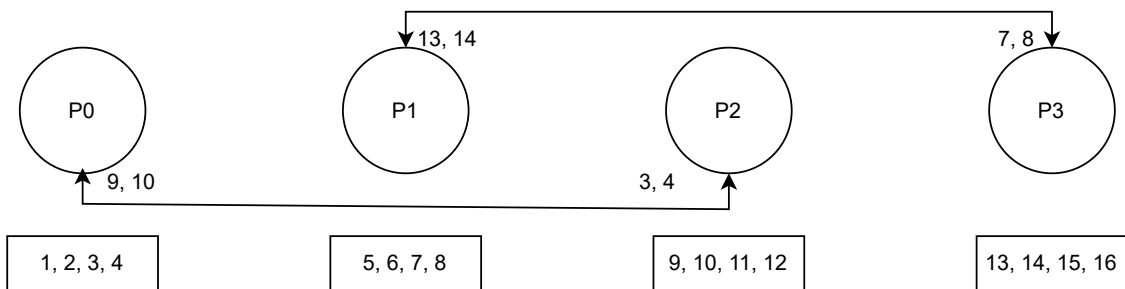
# Rabenseifner's Allreduce Algorithm [SUM]

## 1° Step: Reduce-Scatter [Recursive Halving]

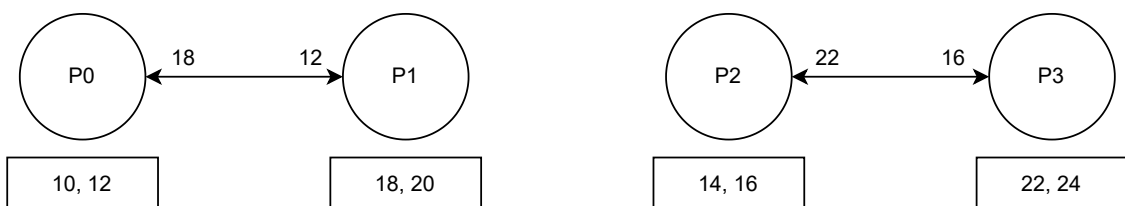
### Initial Setup



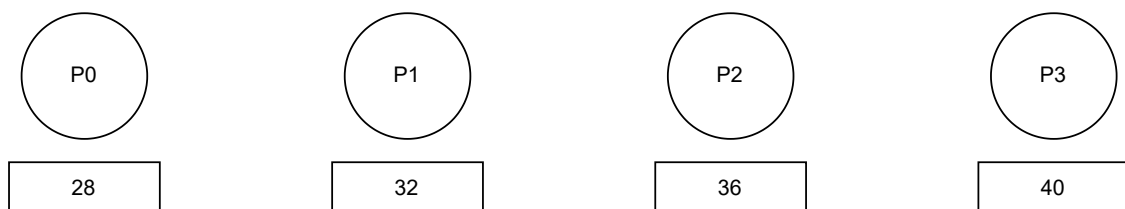
\* i = 1



\* i = 2

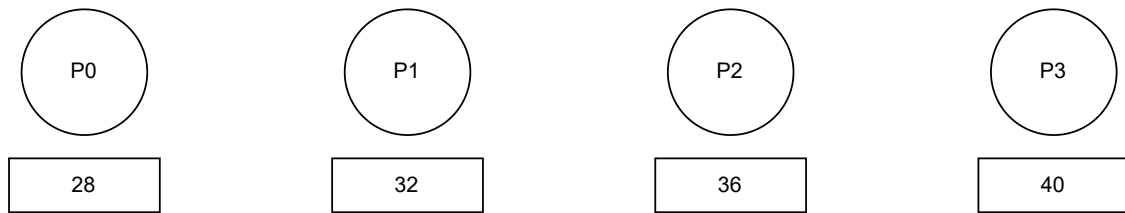


### Intermedie Result

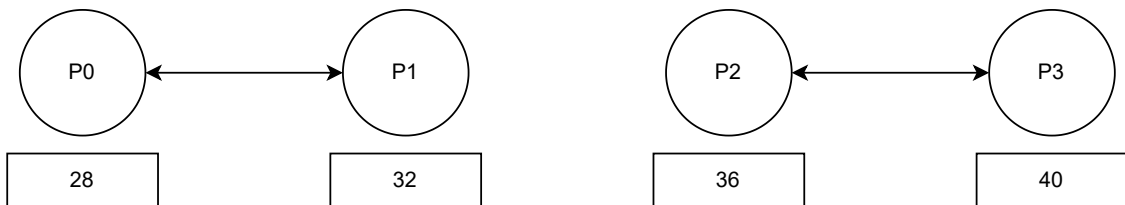


## 2° Step: Allgather [Recursive Doubling]

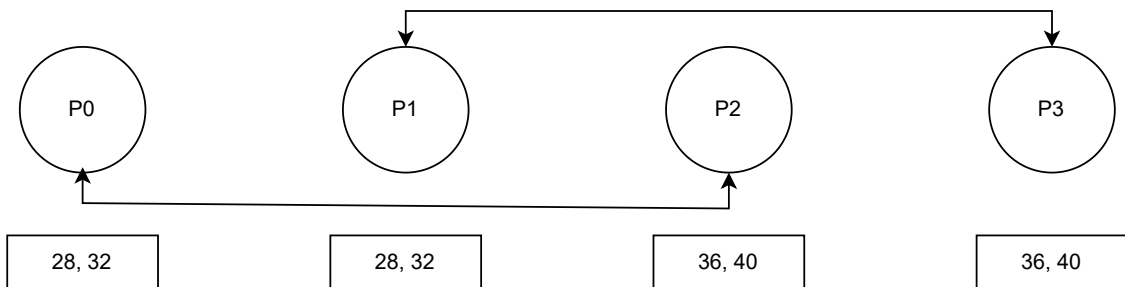
### Intermedie Result



\* i = 1



\* i = 2



### Final Result

