

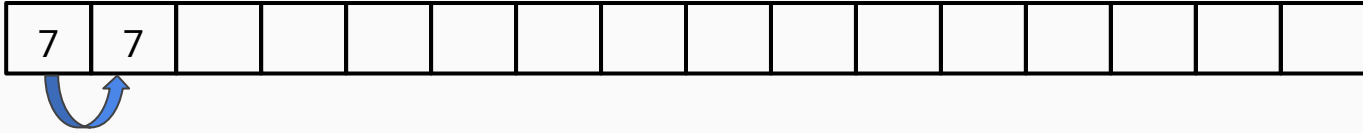


În acest exemplu, rulăm cu 16 procese (fiecare proces, mai puțin procesul 0, nu are nicio valoare)

```
for (pas = 1; pas < nr_procese; pas *= 2)
  if (rank < pas and rank + pas < nr_procese)
    trimite la procesul cu rank-ul [rank + pas]
  else if (rank >= pas and rank < pas * 2)
    primește de la procesul cu rank-ul [rank - pas]
```

Broadcast

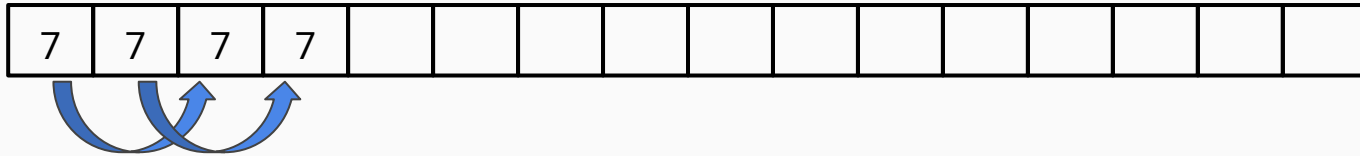
pas = 1



- procesul 0 ($0 < 1, 0 + 1 < 16$) trimite procesului 1 ($0 + 1, 1 \geq 1, 1 < 2 * 1$)

Broadcast

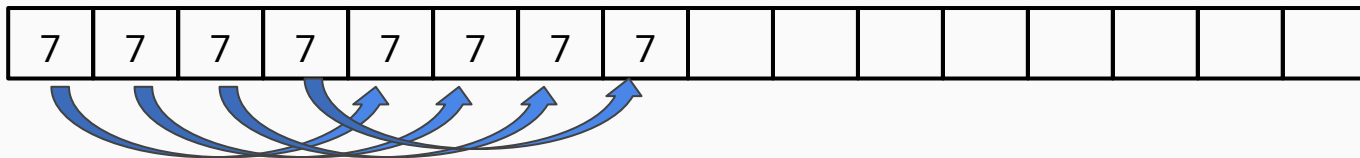
pas = 2



- procesul 0 ($0 < 2$, $0 + 2 < 16$) trimite procesului 2 ($0 + 2$, $2 \geq 2$, $2 < 2 * 2$)
- procesul 1 ($1 < 2$, $1 + 2 < 16$) trimite procesului 3 ($1 + 2$, $3 \geq 2$, $3 < 2 * 2$)

Broadcast

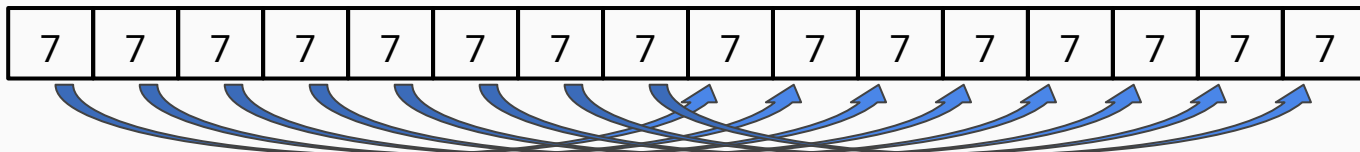
pas = 4



- procesul 0 ($0 < 4, 0 + 4 < 16$) trimite procesului 4 ($0 + 4, 4 \geq 4, 4 < 2 * 4$)
- procesul 1 ($1 < 4, 1 + 4 < 16$) trimite procesului 5 ($1 + 4, 5 \geq 4, 5 < 2 * 4$)
- procesul 2 ($2 < 4, 2 + 4 < 16$) trimite procesului 6 ($2 + 4, 6 \geq 4, 6 < 2 * 4$)
- procesul 3 ($3 < 4, 3 + 4 < 16$) trimite procesului 7 ($3 + 4, 7 \geq 4, 7 < 2 * 4$)

Broadcast

pas = 8



- procesul 0 ($0 < 8, 0 + 8 < 16$) trimite procesului 8 ($0 + 8, 8 \geq 8, 8 < 2 * 8$)
- procesul 1 ($1 < 8, 1 + 8 < 16$) trimite procesului 9 ($1 + 8, 9 \geq 8, 9 < 2 * 8$)
- procesul 2 ($2 < 8, 2 + 8 < 16$) trimite procesului 10 ($2 + 8, 10 \geq 8, 10 < 2 * 8$)
- procesul 3 ($3 < 8, 3 + 8 < 16$) trimite procesului 11 ($3 + 8, 11 \geq 8, 11 < 2 * 8$)
- procesul 4 ($4 < 8, 4 + 8 < 16$) trimite procesului 12 ($4 + 8, 12 \geq 8, 12 < 2 * 8$)
- procesul 5 ($5 < 8, 5 + 8 < 16$) trimite procesului 13 ($5 + 8, 13 \geq 8, 13 < 2 * 8$)
- procesul 6 ($6 < 8, 6 + 8 < 16$) trimite procesului 14 ($6 + 8, 14 \geq 8, 14 < 2 * 8$)
- procesul 7 ($7 < 8, 7 + 8 < 16$) trimite procesului 15 ($7 + 8, 15 \geq 8, 15 < 2 * 8$)