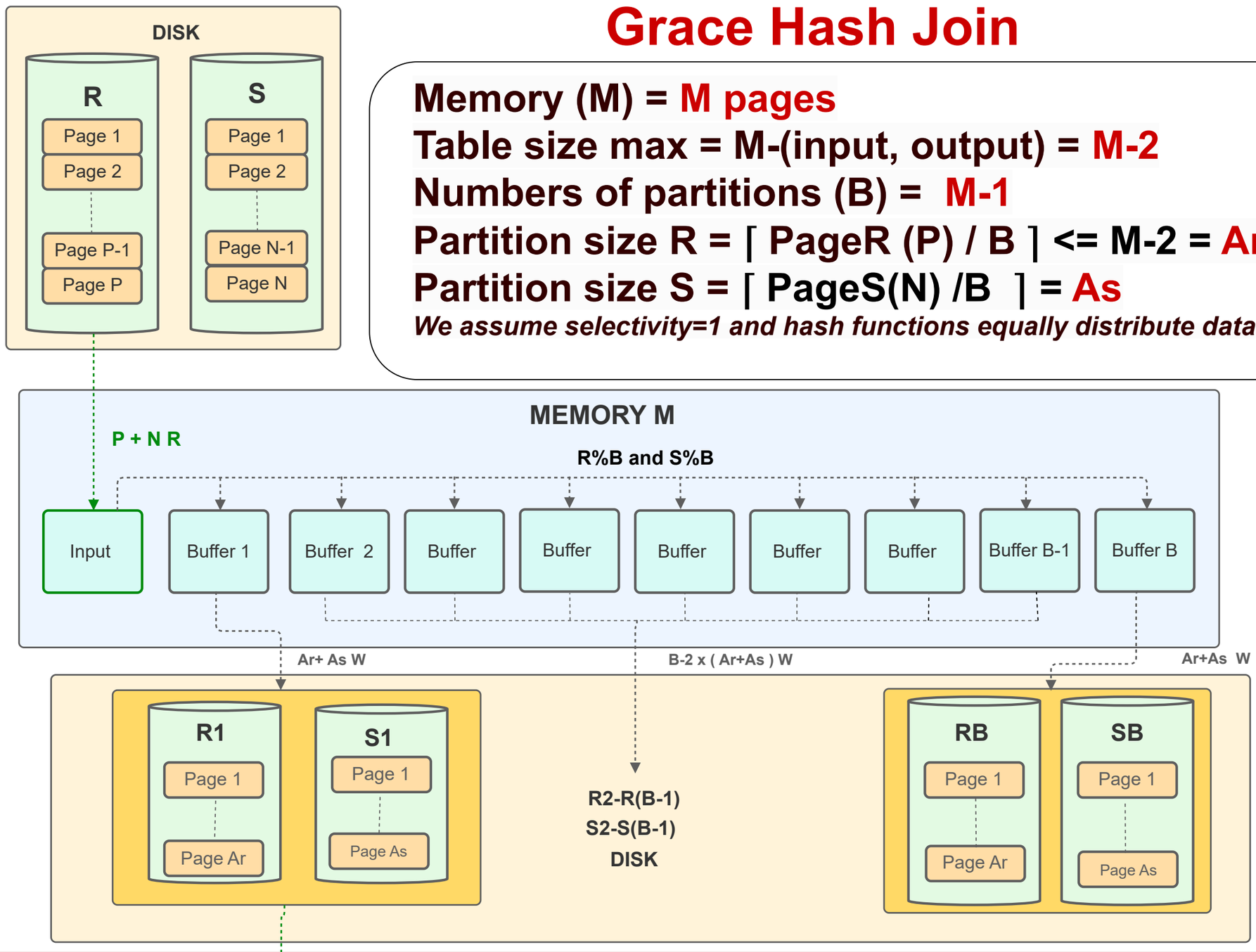
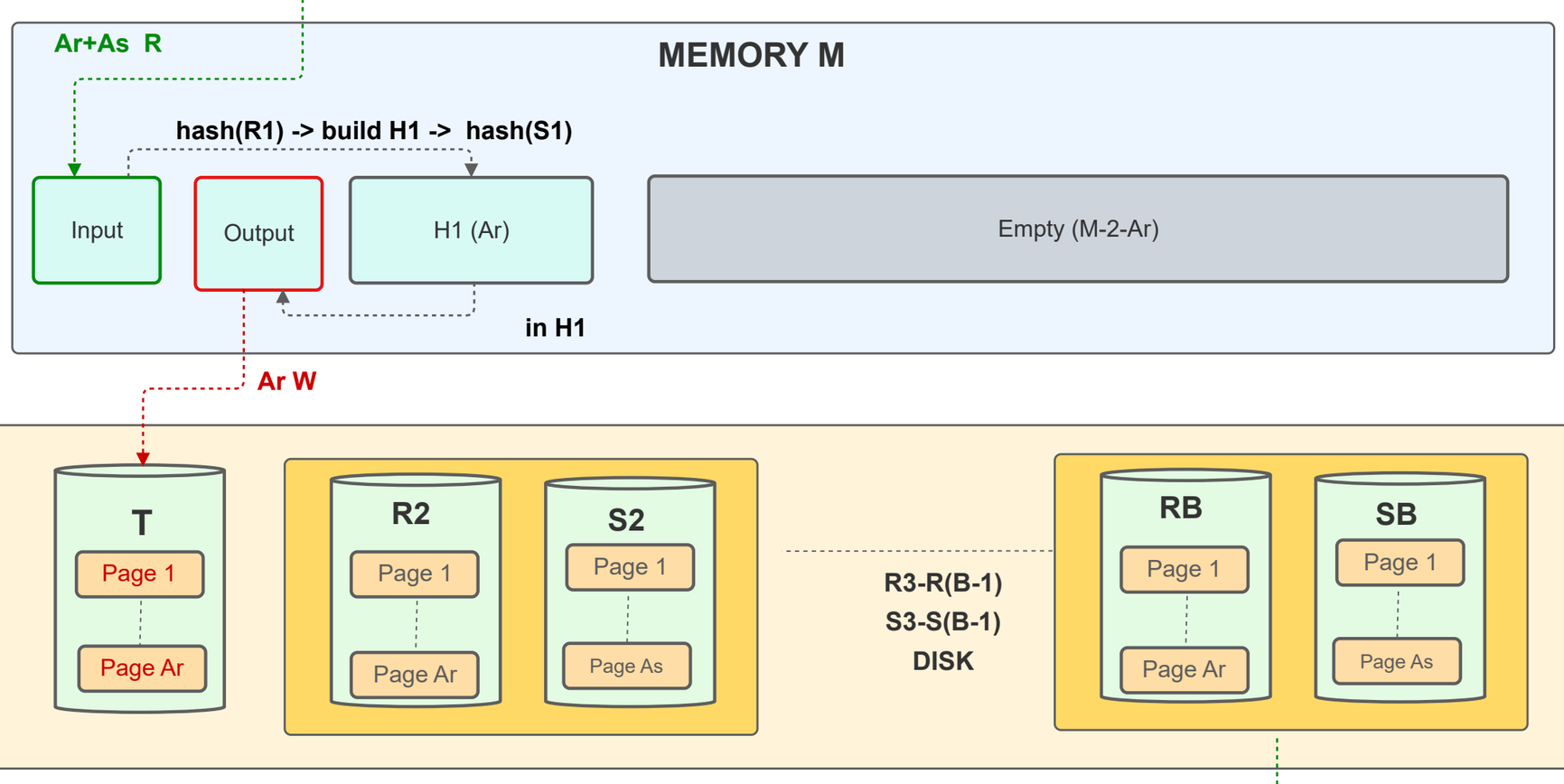
Grace Hash Join

Memory (M) = M pages
Table size max = M-(input, output) = M-2
Numbers of partitions (B) = M-1
Partition size R = [PageR (P) / B] <= M-2 = Ar
Partition size S = [PageS(N) /B] = As
We assume selectivity=1 and hash functions equally distribute data.



BUILD

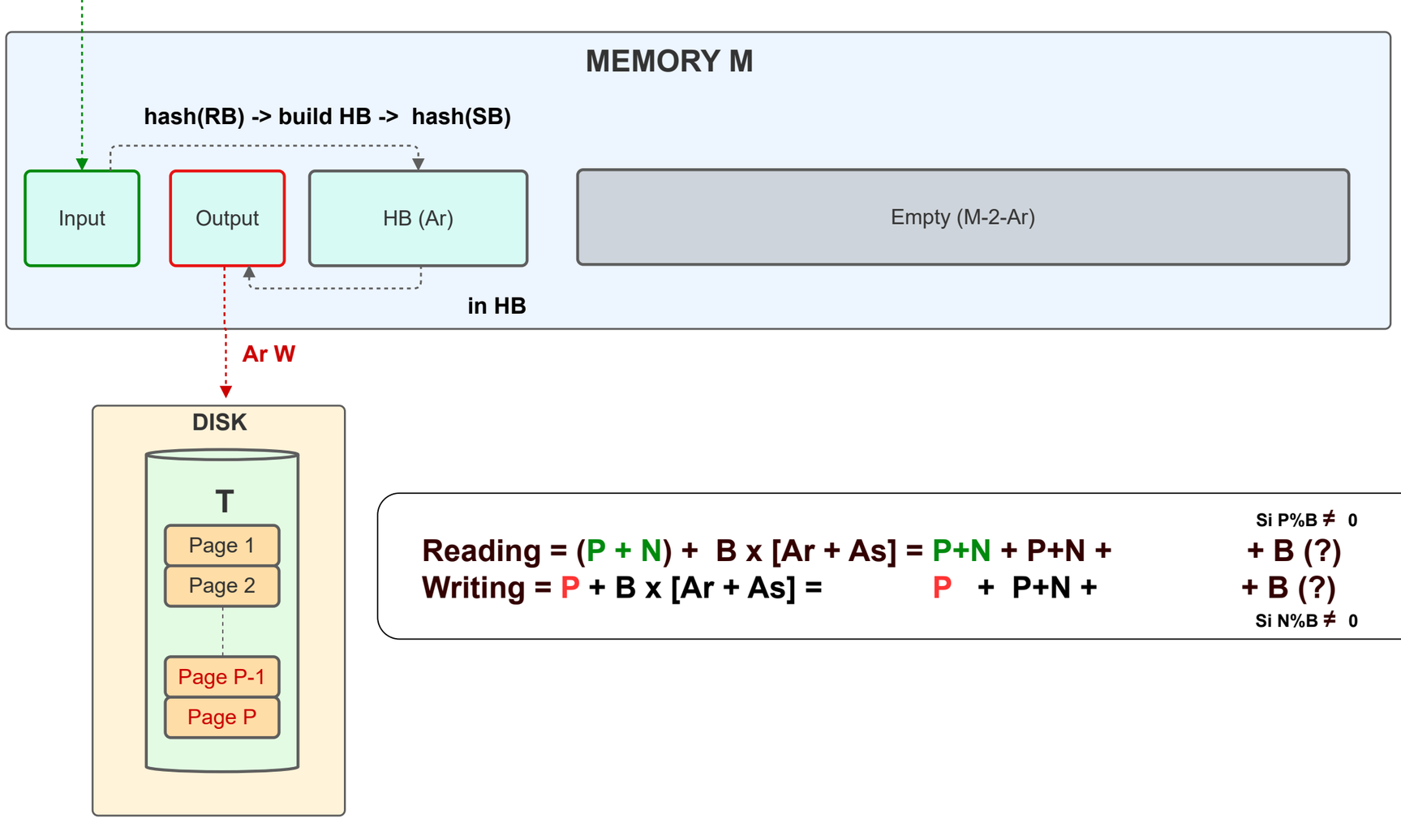


PROBE

BE 1

PROBE 2-(B-1)

(B-2) x (Ar+As) R | (B-2)*Ar W



Reading = (P + N) + B x [Ar + As] = P+N + P+N + + B (?) Si P%B ≠ 0
Writing = P + B x [Ar + As] = P + P+N + + B (?) Si N%B ≠ 0

PROBE B