# SELECT

TUPLES-1000,000,000 selects\*i access of tuples WHERE i=1,2,3,4,5,6,7,8,9,10

NO\_MAP-[6229.45, 12031.16, 18461.45, 24439.54, 30731.4, 36744.51, 42790.27, 48967.45, 55104.22, 61275.49]

TREE\_MAP: [13.37, 28.34, 39.25, 48.49, 59.75, 72.68, 88.32, 97.39, 109.59, 121.82]

HASH\_MAP: [8.1, 10.57, 9.8, 18.98, 14.73, 22.35, 19.72, 29.43, 25.79, 35.53]

LINHASH\_MAP: [23.35, 23.84, 31.76, 28.07, 33.41, 40.52, 46.94, 53.6, 60.18, 66.71]

BPTREE\_MAP: [31.71, 25.71, 28.48, 41.48, 49.86, 60.94, 64.09, 74.28, 82.59, 92.78]

A graph with a line

Description automatically generated

A graph of different colored lines

Description automatically generated

# JOIN

TUPLES-1000,000,000 \*i access of tuples WHERE i=1,2,3,4,5,6,7,8,9,10

NO\_MAP-[4794.41, 9448.51, 14163.4, 18893.95, 23617.01, 28328.71, 32905.94, 37742.24, 42430.84, 47093.03]

TREE\_MAP: [31.13, 58.43, 86.68, 112.89, 144.79, 176.48, 201.37, 233.75, 258.37, 286.14]

HASH\_MAP: [10.24, 5.33, 7.64, 10.15, 13.06, 15.3, 16.79, 19.38, 22.23, 25.06]

LINHASH\_MAP: [11.78, 18.5, 28.25, 37.06, 45.9, 55.82, 64.18, 73.73, 83.67, 92.37]

BPTREE\_MAP: [15.36, 27.71, 41.8, 56.93, 70.84, 87.63, 99.96, 113.65, 130.32, 144.69]

A graph with a blue line

Description automatically generated

A graph of a number of people

Description automatically generated with medium confidence