Benchmark-Project 2

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For the benchmarking, we selected three queries:

1, SELECT * FROM Sailors, Reserves, Boats WHERE Sailors.A = Reserves.G AND Reserves.H = Boats.D AND Sailors.B < 950;

2, SELECT * FROM Sailors S1, Sailors S2 WHERE S1.A = S2.B AND S1.B > 600;

3, SELECT DISTINCT * FROM Sailors S, Reserves R, Boats B WHERE S.A = R.G AND R.H = B.D ORDER BY S.C;

Here is our schema:

- Sailors A B C
  We generated 7000 tuples and each attribute value was chosen uniformly at random in the range 0 to 1500.
- Boats D E F
  We generated 5000 tuples and each attribute value was chosen uniformly at random in the range 0 to 1500.
- Reserves G H
  We generated 8000 tuples and each attribute value was chosen uniformly at random in the range 0 to 1500.

For the SMJ, we used external sort with 5 buffer pages.

Here is our results:

Query	TNLJ	BNLJ(1)	BNLJ(5)	SMJ(Ext 5)
Q1	38109	32623	30375	1183
Q2	7252	5683	5692	573
Q3	61903	44816	44254	2494