1) Experiment 1

Experiment 1 was run for a 4 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	317	217	317	217	217
Cache Misses	7	7	7	7	7
Cache Accesses	12	12	12	12	12
Silent Upgrades	0	0	0	0	0
$-to-$ Transfers	4	5	4	5	5

Conclusion : For experiment 1, the MOSI protocol would be the most apt protocol.

2) Experiment 2

Experiment 2 was run for a 4 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	2367	1167	2267	975	683
Cache Misses	30	30	30	31	34
Cache Accesses	104	104	104	104	104
Silent Upgrades	0	0	1	1	1
$-to-$ Transfers	7	19	8	22	28

Conclusion : MOESIF is the best Protocol for Experiment 2 as it gives the least Run Time.

3) Experiment 3

Experiment 3 was run for an 8 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	3723	3723	2607	2607	1425
Cache Misses	56	56	48	48	48
Cache Accesses	200	200	200	200	200
Silent Upgrades	0	0	8	8	8
$-to-$ Transfers	20	20	23	23	35

Conclusion : MOESIF Protocol is the most suited protocol for Experiment 3.

4) Experiment 4

Experiment 4 was run for a 4 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	2265	1869	1447	851	551
Cache Misses	27	29	19	19	19
Cache Accesses	60	60	60	60	60
Silent Upgrades	0	0	3	3	3
$-to-$ Transfers	5	11	5	11	14

Conclusion : MOESIF would be the most ideal protocol for Experiment 4.

5) Experiment 5 :

Experiment 5 was run for an 8 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	1661	1261	1561	1161	461
Cache Misses	21	21	21	21	21
Cache Accesses	37	37	37	37	37
Silent Upgrades	0	0	0	0	0
$-to-$ Transfers	5	9	6	10	17

Conclusion : MOESIF is the best protocol for Experiment 5.

6) Experiment 6

Experiment 6 was run for a 16 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	7775	6975	4925	4125	3125
Cache Misses	87	87	62	62	62
Cache Accesses	747	747	747	747	747
Silent Upgrades	0	0	25	25	25
$-to-$ Transfers	12	20	15	23	33

Conclusion : MOESIF is the best protocol for Experiment 6.

Experiment 7 :

Experiment 7 was run for a 16 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	6459	5359	3993	2909	2909
Cache Misses	79	79	55	55	55
Cache Accesses	952	952	952	952	952
Silent Upgrades	0	0	24	24	24
$-to-$ Transfers	17	28	17	28	28

Conclusion : For experiment 7, MOESI would be the best protocol to use as it would cheaper to implement and give an optimum result.

Experiment 8 :

Experiment 8 was run for a 16 core processor and the results are as follows

Parameter	MSI	MOSI	MESI	MOESI	MOESIF
Run Time	9477	8477	6441	5241	4141
Cache Misses	110	110	92	92	92
Cache Accesses	800	800	800	800	800
Silent Upgrades	0	0	19	19	19
$-to-$ Transfers	18	28	30	42	53

Conclusion : MOESIF is the best protocol to use for Experiment 8.