



Instituto Superior Técnico

Organização de Computadores
(LEIC)

Anexo de Respostas

Segundo Trabalho de Laboratório: Hierarquia de Memória

Número:	Nome:

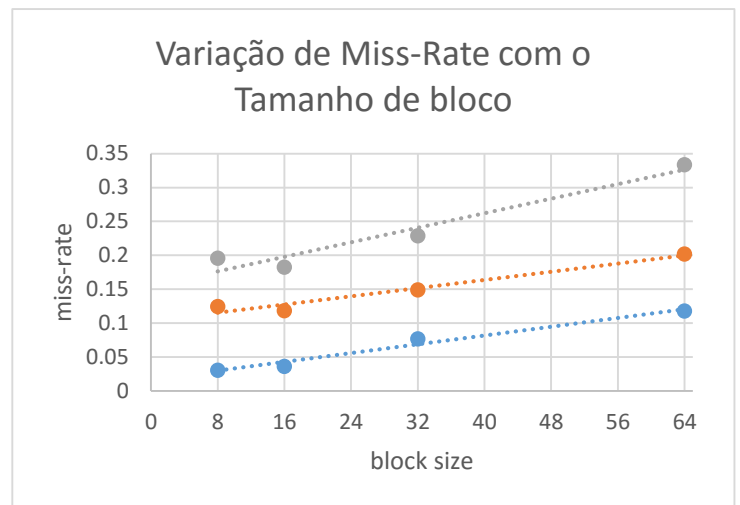
2015/2016

2.2.1

b)

	L1_size			
	Miss-Rate	1Kb	512B	256B
Block Size	8	0.0305	0.1247	0.196
	16	0.0363	0.1184	0.1829
	32	0.077	0.1492	0.2288
	64	0.1181	0.2021	0.334

c)



2.2.2

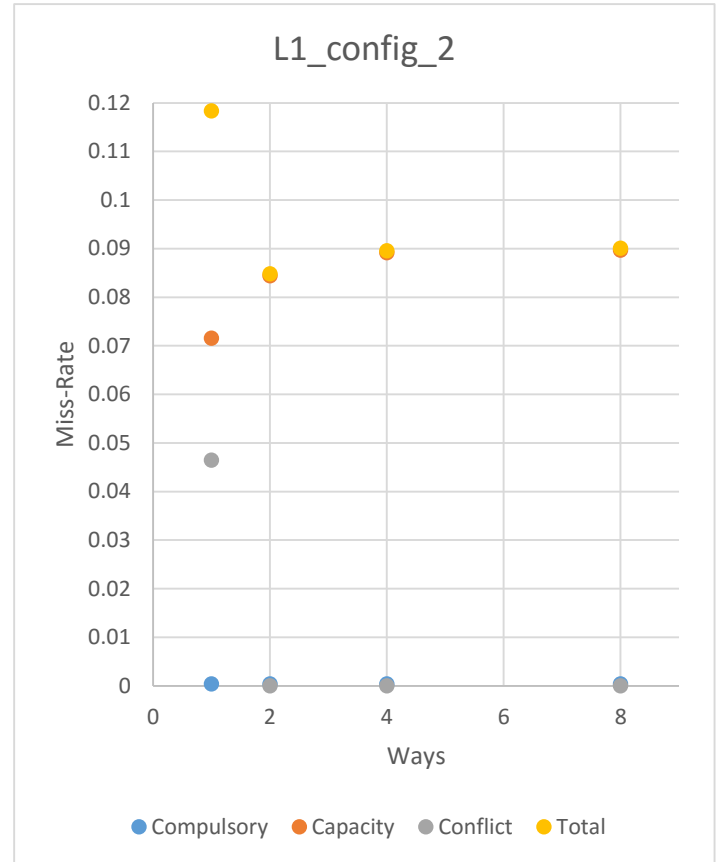
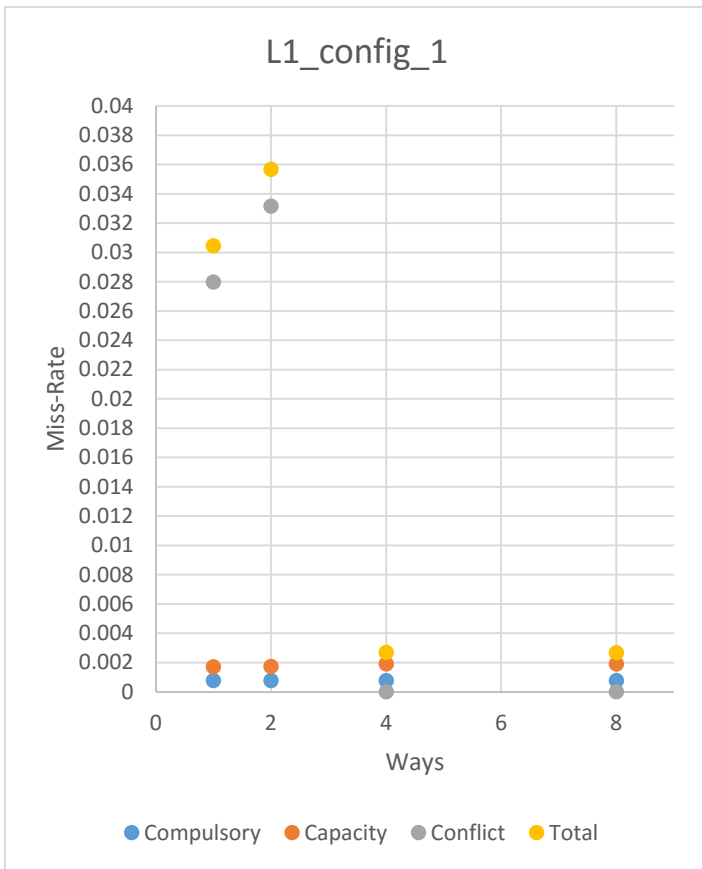
a)

Total Fetches: 12304896

Total Misses	L1_config_1				L1_config_2			
	1-way	2-way	4-way	8-way	1-way	2-ways	4-ways	8-ways
Compulsory	0.0007724	0.000772	0.000772	0.000772	0.000386	0.000386	0.000386	0.000386
Capacity	0.0017075	0.001742	0.001907	0.001902	0.071553	0.084408	0.08915	0.089649
Conflict	0.027975	0.033169	2.21E-05	1.18E-05	0.046422	6.5E-07	1.3E-06	2.6E-06
Total	0.0304549	0.035683	0.002701	0.002686	0.118362	0.084795	0.089538	0.090038

Miss-Rate	L1_config_1				L1_config_2			
	1-way	2-way	4-way	8-way	1-way	2-ways	4-ways	8-ways
Compulsory	0.0007724	0.000772	0.000772	0.000772	0.000386	0.000386	0.000386	0.000386
Capacity	0.0017075	0.001742	0.001907	0.001902	0.071553	0.084408	0.08915	0.089649
Conflict	0.027975	0.033169	2.21E-05	1.18E-05	0.046422	6.5E-07	1.3E-06	2.6E-06
Total	0.0304549	0.035683	0.002701	0.002686	0.118362	0.084795	0.089538	0.090038

b)

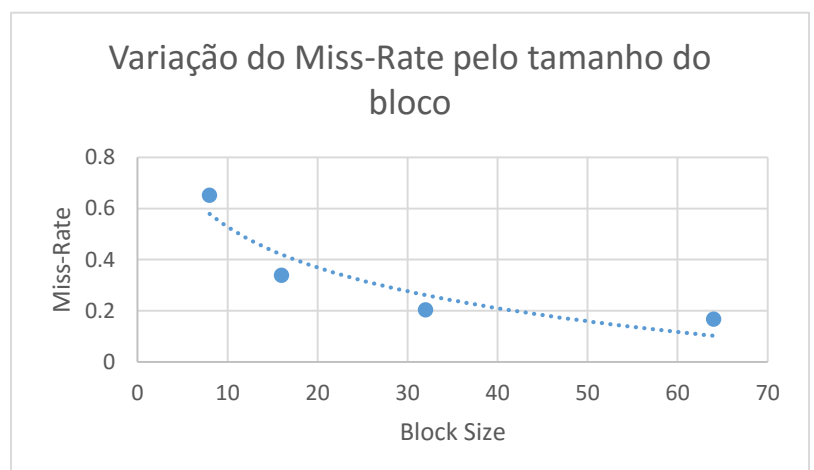


2.3.1

b)

Block Size	Miss-Rate
8	0.6523
16	0.3398
32	0.2038
64	0.1679

c)



2.3.2

a)

Miss-Rate	L1_config_1			
	1-way	2-way	4-way	8-way
Compulsory	0.025	0.025	0.025	0.025
Capacity	0.133	0.163	0.17	0.171
Conflict	0.01	0.018	0.022	0.001
Total	0.168	0.206	0.217	0.197

b)

