Capitolo 1

Analisi Sperimentale

1.1 La libreria TPTP

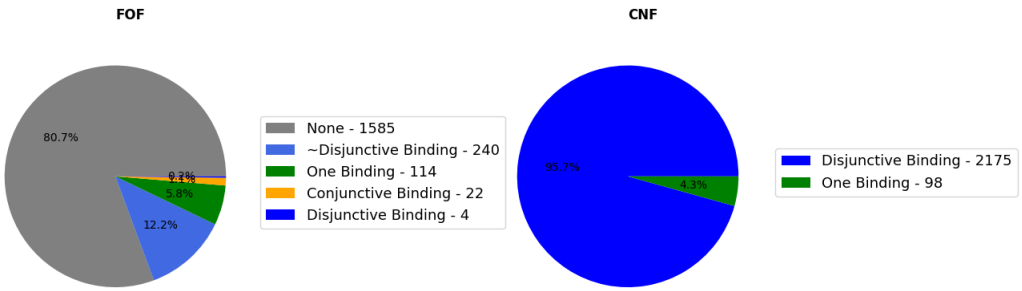

Figura 1.1: Classificazione Libreria TPTP fof e cnf senza uguaglianza

1.2 Analisi dei risultati

$N°$	Vampire	1b naif	1b
1	0.734	0.841	1.022
2	0.567	0.814	0.521
3	0.571	0.79	0.5
4	0.603	0.786	0.591
5	0.531	0.57	0.881
6	0.625	0.402	0.354
7	600000.0	600000.0	1.786
8	0.788	0.647	0.358
9	0.653	1.023	0.384
10	0.691	1.039	0.366
11	1.044	1.032	0.383
12	0.592	0.489	0.323
13	0.53	0.591	0.409
14	0.602	0.395	0.451
15	0.464	0.36	0.332
16	0.734	0.364	0.335
17	11.0	0.484	0.384
18	0.974	0.585	0.359
19	1.368	0.591	0.514
20	1.292	0.571	0.396
21	600000.0	5.353	1.044
22	1.221	0.488	0.418
23	342.0	6.848	1.1
24	337.0	6.975	1.07
25	600000.0	0.892	0.647
26	242.0	0.806	0.584
27	2.937	0.653	0.535
28	39.0	1.93	1.071
29	8.136	1.153	0.845
30	3.402	1.036	0.684
31	0.68	0.002852	0.002953
32	0.645	0.002833	0.003199
33	0.402	0.279	0.251
34	0.229	0.248	0.224
35	0.126	0	0
36	0.398	0.281	0.249
37	0.237	0.234	0.217
38	18000.0	74.0	74.0
39	34000.0	136.0	137.0
40	598000.0	1.887	1.878
41	584000.0	1.903	1.896
42	598000.0	1.501	1.491
43	598000.0	1.54	1.554
44	598000.0	6.307	6.29
45	0.614	0.003116	0.002933
46	0.443	0.347	0.289
47	0.44	0.002824	0.002807
48	0.604	0.002817	0.002902
49	0.465	0.002864	0.002794
50	1.455	0.026	0.026
51	3.638	0.032	0.033
52	0.608	0.002861	0.00295
53	600000.0	0.042	0.044
54	2.662	0.595	0.441
55	1.09	0.594	0.313
56	1.188	0.936	0.48
57	1.128	0.35	0.31
58	0.953	0.385	0.311
59	0.957	0.385	0.393
60	0.691	0.474	0.294
61	2.078	0.792	0.575
62	0.443	0.358	0.298
63	0.421	0.003014	0.002854
64	0.429	0.002817	0.00294
65	0.447	0.002823	0.003353
66	0.458	0.002869	0.0031
67	0.852	0.023	0.024
68	600000.0	0.038	0.038
69	600000.0	0.07	0.071
70	0.53	0.339	0.282
71	0.541	0.352	0.307
72	0.854	0.42	0.486
73	0.927	0.436	0.396
74	0.437	0.002794	0.002931
75	0.584	0.286	0.268
76	0.42	0.325	0.334
77	0.625	0.355	0.293
78	0.651	0.354	0.294
79	0.767	0.35	0.291
80	0.424	0.322	0.284
81	0.437	0.338	0.321
82	0.892	0.489	0.407
83	0.469	0.002802	0.002873
84	1.155	0.432	0.507
85	0.327	0.356	0.312
86	0.119	0	0
87	0.086	0	0
88	3433.0	0.862	0.633
89	1.802	0.828	0.515
90	0.55	0.413	0.358
91	2.666	0.714	0.597
92	0.508	0.487	0.369
93	0.437	0.302	0.33
94	0.421	0.002708	0.003116
95	0.43	0.002837	0.002914
96	0.757	0.347	0.308
97	1.196	1.754	0.393
98	0.42	0.348	0.322
99	0.567	0.352	0.309
100	0.563	0.338	0.281
101	0.535	0.362	0.288
102	0.556	0.354	0.291
103	0.43	0.321	0.266
104	0.866	0.481	0.393
105	0.495	0.41	0.43
106	0.807	0.459	0.365
107	0.377	0.354	0.274
108	0.423	0.399	0.397
109	0.412	0.003173	0.003125
110	0.395	0.317	0.276
111	0.429	0.333	0.292
112	0.711	0.002826	0.002872
113	0.624	0.002856	0.002846
114	0.788	0.348	0.297

Tabella 1.1: Confronto dei tempi di esecuzione in millisecondi tra Vampire, 1b naif e 1b per problemi One Binding su formule fof.

$N°$	Vampire	1b naif	1b
1	381	379	379
2	381	379	379
3	381	379	379
4	381	379	379
5	380	379	379
6	380	379	378
7	9925815	874859	432
8	382	380	379
9	381	381	380
10	381	381	380
11	381	380	379
12	380	379	378
13	380	379	379
14	380	379	378
15	379	379	378
16	381	379	379
17	428	381	380
18	384	385	383
19	384	385	383
20	384	385	382
21	9210243	495	432
22	384	381	381
23	3573	399	382
24	3573	399	382
25	9486812	383	382
26	4038	383	382
27	397	382	381
28	603	383	382
29	424	383	383
30	399	383	383
31	380	374	374
32	380	375	375
33	379	379	379
34	376	379	379
35	373	373	373
36	379	379	379
37	376	379	379
38	366755	373599	373599

$N°$	Vampire	1b naif	1b
39	585890	600171	600171
40	11997208	9143	9143
41	12275854	9143	9143
42	11436239	9144	9144
43	11627330	9144	9144
44	11350340	9143	9143
45	380	375	375
46	379	379	378
47	378	374	374
48	380	374	374
49	378	374	374
50	383	375	375
51	394	375	375
52	380	374	374
53	7228190	376	376
54	387	382	381
55	383	383	381
56	384	382	381
57	383	380	380
58	382	381	380
59	383	381	380
60	381	380	380
61	390	381	380
62	380	380	379
63	378	374	374
64	378	374	374
65	378	374	374
66	378	374	374
67	380	374	374
68	6776295	376	376
69	10184024	375	375
70	381	380	379
71	381	380	379
72	382	380	380
73	382	380	380
74	378	374	374
75	381	379	379
76	378	378	378
77	381	380	379

$N°$	Vampire	1b naif	1b
78	381	380	380
79	382	380	380
80	379	380	379
81	378	379	378
82	384	381	380
83	378	374	374
84	385	380	380
85	379	380	379
86	374	373	373
87	373	373	373
88	38045	382	381
89	388	381	380
90	381	380	379
91	393	381	380
92	381	380	379
93	378	378	378
94	378	374	374
95	378	374	374
96	382	380	380
97	383	380	379
98	378	378	378
99	381	380	379
100	381	380	379
101	381	380	379
102	381	380	379
103	379	380	379
104	382	381	380
105	381	380	380
106	382	380	380
107	379	379	379
108	380	380	380
109	378	374	374
110	379	379	379
111	379	380	379
112	380	374	374
113	380	374	374
114	381	380	380

Tabella 1.2: Confronto dell'utilizzo della memoria in Kb tra Vampire, 1b naif e 1b per problemi One Binding su formule fof.

1.3 Ottimizzazioni

1.4 Conclusioni e Possibili Sviluppi futuri