Pregnant Bits

	Ω	S0=ld(Ω)	S1=ld(Ω+1)	ΔS=S1-S0	ld(Ω)+ld(ΔS)	Ω * ΔS	2 ^ (Ω*ΔS)
- ...							
-12	0.0000038	-18	0.0000055	18.0000055	-13.8300746	0.0000687	1.0000476
-11	0.0000153	-16	0.0000220	16.0000220	-11.9999980	0.0002441	1.0001692
-10	0.0039063	-8	0.0056245	8.0056245	-4.9989860	0.0312720	1.0219127
-9	0.0078125	-7	0.0112273	7.0112273	-4.1903330	0.0547752	1.0386973
-8	0.0156250	-6	0.0223678	6.0223678	-3.4096692	0.0940995	1.0673989
-7	0.0312500	-5	0.0443941	5.0443941	-2.6653190	0.1576373	1.1154589
-6	0.0625000	-4	0.0874628	4.0874628	-1.9687944	0.2554664	1.1937216
-5	0.1250000	-3	0.1699250	3.1699250	-1.3355513	0.3962406	1.3160740
-4	0.2500000	-2	0.3219281	2.3219281	-0.7846767	0.5804820	1.4953488
-3	0.3535534	-1.5	0.4367518	1.9367518	-0.5463609	0.6847452	1.6074180
-2	0.5000000	-1	0.5849625	1.5849625	-0.3355513	0.7924813	1.7320508
-1	0.7071068	-0.5	0.7715533	1.2715533	-0.1534081	0.8991240	1.8649332
0	1	0	1	1	0	1	2
1	1.4142136	0.5	1.2715533	0.7715533	0.1258377	1.0911411	2.1304248
2	2	1	1.5849625	0.5849625	0.2264160	1.1699250	2.2500000
3	2.8284271	1.5	1.9367518	0.4367518	0.3048855	1.2353206	2.3543366
4	4	2	2.3219281	0.3219281	0.3648104	1.2877124	2.4414063
5	8	3	3.1699250	0.1699250	0.4429700	1.3594000	2.5657845
6	16	4	4.0874628	0.0874628	0.4848140	1.3994055	2.6379285
7	32	5	5.0443941	0.0443941	0.5065124	1.4206118	2.6769901
8	64	6	6.0223678	0.0223678	0.5175680	1.4315400	2.6973450
9	128	7	7.0112273	0.0112273	0.5231491	1.4370887	2.7077390
10	256	8	8.0056245	0.0056245	0.5259532	1.4398846	2.7129916
11	65536	16	16.0000220	0.0000220	0.5287554	1.4426840	2.7182611
12	262144	18	18.0000055	0.0000055	0.5287636	1.4426923	2.7182766
... +							
	1	2	3	4	5	6	7

Ω: parent states

all units: bit

S0=ld(Ω): address size per parent (determines position of state in history)

S1=ld(Ω+1): address size per parent+child after state would generate child state

ΔS=S1-S0: potential address size increase per state

ld(Ω)+ld(ΔS): parent address size + address size of potential address size increase per state

Ω * ΔS: potential address size increase of ensemble

2 ^ (Ω*ΔS): potential weight growth factor of ensemble

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Pregnant Nits

	Ω	S0=ln(Ω)	S1=ln(Ω+1)	ΔS=S1-S0	ln(Ω)+ln(ΔS)	Ω * ΔS	e ^ (Ω*ΔS)
- ...							
-12	0.0000000	-18	0.0000000	18.0000000	-15.1096282	0.0000003	1.0000003
-11	0.0000001	-16	0.0000001	16.0000001	-13.2274113	0.0000018	1.0000018
-10	0.0003355	-8	0.0003354	8.0003354	-5.9205165	0.0026838	1.0026874
-9	0.0009119	-7	0.0009115	7.0009115	-5.0539596	0.0063840	1.0064044
-8	0.0024788	-6	0.0024757	6.0024757	-4.2078280	0.0148786	1.0149899
-7	0.0067379	-5	0.0067153	5.0067153	-3.3892199	0.0337350	1.0343105
-6	0.0183156	-4	0.0181499	4.0181499	-2.6091784	0.0735950	1.0763708
-5	0.0497871	-3	0.0485874	3.0485874	-1.8853217	0.1517802	1.1639044
-4	0.1353353	-2	0.1269280	2.1269280	-1.2453213	0.2878484	1.3335551
-3	0.2231302	-1.5	0.2014133	1.7014133	-0.9685408	0.3796366	1.4617533
-2	0.3678794	-1	0.3132617	1.3132617	-0.7274861	0.4831220	1.6211276
-1	0.6065307	-0.5	0.4740770	0.9740770	-0.5262649	0.5908076	1.8054458
0	1	0	0.6931472	0.6931472	-0.3665129	0.6931472	2
1	1.6487E+0	0.5	0.9740770	0.4740770	-0.2463856	0.7816208	2.1850109
2	2.7183E+0	1	1.3132617	0.3132617	-0.1607164	0.8515336	2.3432376
3	4.4817E+0	1.5	1.7014133	0.2014133	-0.1023964	0.9026717	2.4661832
4	7.3891E+0	2	2.1269280	0.1269280	-0.0641352	0.9378782	2.5545554
5	2.0086E+1	3	3.0485874	0.0485874	-0.0243920	0.9759030	2.6535624
6	5.4598E+1	4	4.0181499	0.0181499	-0.0090887	0.9909525	2.6937991
7	1.4841E+2	5	5.0067153	0.0067153	-0.0033596	0.9966461	2.7091802
8	4.0343E+2	6	6.0024757	0.0024757	-0.0012381	0.9987627	2.7149205
9	1.0966E+3	7	7.0009115	0.0009115	-0.0004558	0.9995443	2.7170435
10	2.9810E+3	8	8.0003354	0.0003354	-0.0001677	0.9998323	2.7178260
11	8.8861E+6	16	16.0000001	0.0000001	-0.0000001	0.9999999	2.7182817
12	6.5660E+7	18	18.0000000	0.0000000	0.0000000	1.0000000	2.7182817
... +							
	1	2	3	4	5	6	7

Ω: parent states

all units: nit

S0=ln(Ω): address size per parent (determines position of state in history)

S1=ln(Ω+1): address size per parent+child after state would generate child state

ΔS=S1-S0: potential address size increase per state

ln(Ω)+ln(ΔS): parent address size + address size of potential address size increase per state

Ω * ΔS: potential address size increase of ensemble

e ^ (Ω*ΔS): potential weight growth factor of ensemble

Götz Kluge, 2009-04-20

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