## ${\bf Example Extended Profile}$

July 6, 2018

 ${\bf Group: Dihedral Group (40)}$ 

Searching up to index : 20

How many normal groups are found : 8

Total Time in ms : 156

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
22	0	0	3280	0	Intersection
0	0	0	0	0	EpimorphismPGroup
25	0	0	3864	0	NextPrimeInt
7	0	0	5024	1072	FindIntersections
0	0	0	0	0	${\bf Low Index Subgroups Fp Group}$
1	0	0	2080	1920	FindTQuotients
88	1	0	245218	1712	PreImagesRepresentative
92	2	0	93248	0	ExponentSum
10	2	1	219364	48752	PullBackH
10	3	0	234286	0	${\bf Natural Homomorphism By Subspace}$
6	3	0	387934	5184	IsSubgroup
169	3	0	313466	3920	Index
1833	4	2	59216	0	${\bf Generators Of MagmaWith Inverses}$
3	4	0	113486	2304	Core
67	4	0	487974	4864	${\bf Group Homomorphism By Images NC}$
44	5	0	395694	0	$\operatorname{GModuleByMats}$
10	9	4	1268350	407966	AddGroup
8	12	0	994533	27996	$SMTX\_BasesMaximalSubmodules$
414	15	0	718028	2976	Image
14	18	6	2004867	405970	PreImage
18	20	1	2558675	72000	Isomorphism Fp Group

10	27	22	2335689	2129977	Kernel
8	153	93	29231390	9210385	FindPQuotients
1	156	156	29348620	29348476	LowIndexNormal

## ${\bf Group: Dihedral Group (100)}$

Searching up to index : 50

How many normal groups are found : 8

Total Time in ms: 158

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
26	0	0	3472	0	Intersection
3	0	0	86686	2256	Core
51	0	0	8744	0	NextPrimeInt
7	0	0	7720	1264	FindIntersections
10	0	0	134354	0	NaturalHomomorphismBySubspace
0	0	0	0	0	LowIndexSubgroupsFpGroup
0	0	0	0	0	EpimorphismPGroup
1	0	0	968	808	FindTQuotients
101	0	0	96328	0	ExponentSum
36	1	0	58496	0	$\operatorname{GModuleByMats}$
194	1	0	305332	4000	Index
442	2	0	675886	2880	Image
72	2	0	238166	1664	PreImagesRepresentative
6	3	1	360454	5040	IsSubgroup
2182	3	0	64576	0	GeneratorsOfMagmaWithInverses
10	3	0	254719	62008	PullBackH
93	5	0	716786	6080	${\bf Group Homomorphism By Images NC}$
8	5	0	587053	20164	$SMTX\_BasesMaximal Submodules$
10	7	4	1604670	379830	AddGroup
14	14	1	2110436	405292	PreImage
10	14	14	2360106	2208610	Kernel
18	17	0	2822276	64864	IsomorphismFpGroup
8	157	56	49431930	9241238	FindPQuotients
1	158	158	49523112	49522968	LowIndexNormal