## example Base Group

6. Juli 2018

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

Searching up to index : 20

How many normal groups are found : 8

Total Time in ms: 119

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
22	0	0	3280	0	Intersection
0	0	0	0	0	LowIndexSubgroupsFpGroup
25	0	0	3864	0	NextPrimeInt
1	0	0	2080	1920	FindTQuotients
7	1	0	5120	1072	FindIntersections
10	1	0	219252	48800	PullBackH
92	1	1	93536	0	ExponentSum
88	2	0	245738	1712	PreImagesRepresentative
3	2	0	123662	2256	Core
1833	4	0	59888	0	${\bf Generators Of MagmaWith Inverses}$
6	4	0	384934	5376	IsSubgroup
10	4	0	231310	0	${\bf Natural Homomorphism By Subspace}$
169	5	0	313626	3920	Index
67	6	1	491150	4864	${\bf Group Homomorphism By Images NC}$
44	6	0	394646	0	$\operatorname{GModuleByMats}$
414	7	0	717004	2736	Image
10	8	4	1267846	405446	AddGroup
8	12	0	991405	27612	$SMTX\_BasesMaximalSubmodules$
14	14	7	2003995	408570	PreImage
10	19	16	2345377	2138921	Kernel
18	27	3	2553859	72080	IsomorphismFpGroup
8	115	87	16413567	9212321	FindPQuotients
1	119	119	16527485	16527341	LowIndexNormal

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

Searching up to index : 50

How many normal groups are found : 8

Total Time in ms:98

Count	AbsT/ms	ChildT/ms	AbsS/kb	ChildS/kb	Function
26	0	0	3424	0	Intersection
10	0	0	134066	0	NaturalHomomorphismBySubspace
72	0	0	239038	1616	PreImagesRepresentative
36	0	0	58160	0	$\operatorname{GModuleByMats}$
0	0	0	0	0	LowIndexSubgroupsFpGroup
51	0	0	8744	0	NextPrimeInt
7	0	0	7672	1216	FindIntersections
1	0	0	1272	1112	FindTQuotients
10	1	0	254183	62008	PullBackH
3	1	1	86062	2304	Core
101	1	1	96376	0	ExponentSum
2182	2	1	64240	0	${\bf Generators Of MagmaWith Inverses}$
194	2	0	311420	4000	Index
93	3	0	712754	6128	${\bf Group Homomorphism By Images NC}$
6	3	0	357238	4944	IsSubgroup
8	5	0	587285	20116	$SMTX\_BasesMaximal Submodules$
442	7	0	675534	2736	Image
10	9	3	1601126	377142	AddGroup
14	11	4	2118580	407844	PreImage
10	12	12	2367106	2216274	Kernel
18	16	0	2824164	63896	IsomorphismFpGroup
8	97	50	22835601	9242774	FindPQuotients
1	98	98	22929887	22929743	LowIndexNormal