## ${\bf Example Extended Profile}$

## August 2, 2018

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

Searching up to index : 20

How many normal groups are found : 8

Total Time in s : 0.1

Count	AbsT/s	ChildT/s	AbsS/gb	ChildS/gb	Function
22	0.0	0.0	0.0	0.0	Intersection
7	0.0	0.0	0.0	0.0	FindIntersections
25	0.0	0.0	0.0	0.0	NextPrimeInt
0	0.0	0.0	0.0	0.0	${\bf Low Index Subgroups Fp Group}$
1	0.0	0.0	0.0	0.0	${\bf Find TQ uotients}$
92	0.0	0.0	0.0	0.0	ExponentSum
10	0.0	0.0	0.2	0.0	PullBackH
3	0.0	0.0	0.1	0.0	Core
169	0.0	0.0	0.3	0.0	Index
1833	0.0	0.0	0.0	0.0	Generators Of Magma With Inverses
414	0.0	0.0	0.7	0.0	Image
88	0.0	0.0	0.2	0.0	PreImagesRepresentative
67	0.0	0.0	0.4	0.0	${\bf Group Homomorphism By Images NC}$
10	0.0	0.0	0.2	0.0	${\bf Natural Homomorphism By Subspace}$
44	0.0	0.0	0.3	0.0	${\bf GModule By Mats}$
10	0.0	0.0	1.2	1.2	AddGroup
20	0.0	0.0	1.2	0.0	IsSubgroup
25	0.0	0.0	2.2	0.2	EpimorphismQuotientSystem
8	0.0	0.0	1.0	0.0	$SMTX\_BasesMaximalSubmodules$
14	0.0	0.0	1.9	0.4	PreImage
10	0.0	0.0	2.3	2.1	Kernel

18	0.0	0.0	2.5	0.0	IsomorphismFpGroup
50	0.0	0.0	17.4	0.0	PQuotient
8	0.1	0.1	29.2	28.6	FindPQuotients
1	0.1	0.1	29.3	29.3	LowIndexNormal

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

Searching up to index: 50

How many normal groups are found : 8

Total Time in s:0.1

Count	AbsT/s	ChildT/s	AbsS/gb	ChildS/gb	Function
26	0.0	0.0	0.0	0.0	Intersection
51	0.0	0.0	0.0	0.0	NextPrimeInt
36	0.0	0.0	0.0	0.0	GModuleByMats
10	0.0	0.0	0.2	0.0	PullBackH
0	0.0	0.0	0.0	0.0	Low In dex Subgroups Fp Group
1	0.0	0.0	0.0	0.0	$\operatorname{FindTQuotients}$
101	0.0	0.0	0.0	0.0	ExponentSum
3	0.0	0.0	0.0	0.0	Core
10	0.0	0.0	0.1	0.0	${\bf Natural Homomorphism By Subspace}$
7	0.0	0.0	0.0	0.0	FindIntersections
2182	0.0	0.0	0.0	0.0	Generators Of Magma With Inverses
72	0.0	0.0	0.2	0.0	PreImagesRepresentative
194	0.0	0.0	0.3	0.0	Index
93	0.0	0.0	0.7	0.0	${\bf Group Homomorphism By Images NC}$
442	0.0	0.0	0.6	0.0	Image
8	0.0	0.0	0.5	0.0	$SMTX\_BasesMaximal Submodules$
10	0.0	0.0	1.6	1.6	AddGroup
20	0.0	0.0	1.5	0.0	IsSubgroup
18	0.0	0.0	2.8	0.0	IsomorphismFpGroup
51	0.0	0.0	4.3	0.5	EpimorphismQuotientSystem
14	0.0	0.0	2.1	0.4	PreImage
10	0.0	0.0	2.3	2.2	Kernel
102	0.0	0.0	35.8	0.0	PQuotient
8	0.1	0.1	49.4	48.9	FindPQuotients
1	0.1	0.1	49.5	49.5	LowIndexNormal