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Finding Subgroups
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The task of finding subgroups of a finite group which have particular properties looks as if it was ready-made for computer algebra. The practice looks more disappointing no system has a command ``SubgroupsWithProperty''. However constructing all subgroups and filtering for those with the desired property not only is of huge memory cost; first constructing all groups and then filtering for the desired property is highly expensive.

Instead it becomes necessary to tailor the existing methods to the problem at hand.

With this view in mind I will survey the existing algorithms for finding subgroups, indicating how they could be adapted to only find subgroups with particular properties.

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