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Title:	Abelianization of the unit group of an integral group ring
Authors:	Maheshwary, Sugandha (/jspui/browse?type=author&value=Maheshwary%2C+Sugandha)
Keywords:	Abelianization integral group ring
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Publisher:	Pacific Journal of Mathematics
Citation:	Pacific Journal of Mathematics, 312(2), 309–334.
Abstract:	For a finite group G and $U := U(ZG)$, the group of units of the integral group ring of G , we study the implications of the structure of G on the abelianization U/U' of U . We pose questions on the connections between the exponent of G/G' and the exponent of U/U' as well as between the ranks of the torsion-free parts of $Z(U)$, the center of U , and U/U' . We show that the units originating from known generic constructions of units in ZG are well-behaved under the projection from U to U/U' and that our questions have a positive answer for many examples. We then exhibit an explicit example which shows that the general statement on the torsion-free part does not hold, which also answers questions from (Bächle et al. 2018b).
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