

The group G is isomorphic to the group labelled by [100, 11] in the Small Groups library.

Ordinary character table of $G \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$:

	$1a$	$5a$	$4a$	$4b$	$2a$	$5b$	$5c$	$5d$	$5e$	$5f$
χ_1	1	1	1	1	1	1	1	1	1	1
χ_2	1	1	-1	-1	1	1	1	1	1	1
χ_3	1	1	$-E(4)$	$E(4)$	-1	1	1	1	1	1
χ_4	1	1	$E(4)$	$-E(4)$	-1	1	1	1	1	1
χ_5	4	4	0	0	0	-1	-1	-1	-1	-1
χ_6	4	-1	0	0	0	4	-1	-1	-1	-1
χ_7	4	-1	0	0	0	-1	4	-1	-1	-1
χ_8	4	-1	0	0	0	-1	-1	4	-1	-1
χ_9	4	-1	0	0	0	-1	-1	-1	-1	-1
χ_{10}	4	-1	0	0	0	-1	-1	-1	4	-1

Trivial source character table of $G \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$ at $p = 5$:

$$P_1 = Group([()]) \cong 1$$

$$P_2 \equiv Group([(1, 2, 3, 4, 5)]) \cong C_5$$

$$P_3 = Group([(6, 7, 8, 9, 10)]) \cong C5$$

$$P_4 = Group([(1, 2, 3, 4, 5)(6, 7, 8, 9, 10)]) \cong C_5$$

$$P_5 = Group([(1, 2, 3, 4, 5)(6, 8, 10, 7, 9)]) \cong C_5$$

$$P_6 = Group([(1, 2, 3, 4, 5)(6, 9, 7, 10, 8)]) \cong C_5$$

$$P_7 = Group([(1, 2, 3, 4, 5)(6, 10, 9, 8, 7)]) \cong C_5$$

$$P_8 = \text{Group}([(1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong C_5 \times C_5$$

$$N_1 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_2 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_3 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_4 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_5 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_6 = Group([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (C5 \times C5) : C4$$

$$N_7 = \text{Group}([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (\text{C}_5 \times \text{C}_5) : \text{C}_4$$

$$N_8 = Group([(2, 3, 5, 4)(7, 8, 10, 9), (2, 5)(3, 4)(7, 10)(8, 9), (1, 2, 3, 4, 5), (6, 7, 8, 9, 10)]) \cong (C_5 \times C_5) : C_4$$