

Number of vertices  $n = 4$ .

Adjacencies of Graph

1. vertex 1 adjacent to 2 3 4
2. vertex 2 adjacent to 1
3. vertex 3 adjacent to 1
4. vertex 4 adjacent to 1

Size of automorphism group of the graph=6

Full group:  $|Aut(polytope)| = 48$

Restricted group:  $|Aut(G) \times switch| = 48$

Number of orbits for the full group : 1

List of orbits of facets for the full group:

1. Inequality 1 with incidence 4 and stabilizer of size 8. Orbit size is 6

|           |           |           |  |  |  |
|-----------|-----------|-----------|--|--|--|
| (1,2) : 0 | (1,3) : 0 | (1,4) : 1 |  |  |  |
|-----------|-----------|-----------|--|--|--|