

```
P [] tc 0, [1, 2, 3, 4, 5, 6, 7, 8] W [1, 2, 3, 4, 5, 6, 7, 8] C [1] partion: [[1], [2, 4, 8], [6], [3, 5, 7]] cmp: 0
   P [1] tc 1, [2, 4, 8] W [2, 4, 8]
   C [1, 2] partion: [[1], [2], [4, 8], [6], [3], [5, 7]] cmp: O P [1, 2] tc 2, [4, 8] W [4, 8]
  C [1, 2, 4] partion: [[1], [2], [4], [8], [6], [3], [5], [7]] cmp: -1 P [1, 2, 4] LEAF B [1, 2, 4] to: PARENT
  R [1, 2] MCR: [1, 2, 3, 4, 5, 6, 7, 8] old W: [8] W: [8] P [1, 2] tc 2, [4, 8] W [8]
   C [1, 2, 8] partion: [[1], [2], [8], [4], [6], [3], [7], [5]] cmp: 0
   P [1, 2, 8] LEAF
   B [1, 2, 8] to: [1, 2]
   R [1, 2] MCR: [1, 2, 3, 4, 5, 6] old W: [] W: []
   P [1, 2] tc 2, [4, 8] W []
   B [1, 2] to: PARENT
   R [1] MCR: [1, 2, 3, 4, 5, 6] old W: [4, 8] W: [4]
   P [1] tc 1, [2, 4, 8] W [4]
  C [1, 4] partion: [[1], [4], [2, 8], [6], [5], [3, 7]] cmp: 0
P [1, 4] tc 2, [2, 8] W [2, 8]
C [1, 4, 2] partion: [[1], [4], [2], [8], [6], [5], [3], [7]] cmp: 0
   P [1, 4, 2] LEAF
   B [1, 4, 2] to: [1]
   R [1] MCR: [1, 2, 3, 6] old W: [] W: []
             tc 1, [2, 4, 8] W []
              to: PARENT
  R [] MCR: [1, 2, 3, 6] old W: [2, 3, 4, 5, 6, 7, 8] W: [2, 3, 6]
P [] tc 0, [1, 2, 3, 4, 5, 6, 7, 8] W [2, 3, 6]
C [2] partion: [[2], [1, 4, 8], [3], [5, 6, 7]] cmp: 0
P [2] tc 1, [1, 4, 8] W [1, 4, 8]
   C [2, 1] partion: [[2], [1], [4, 8], [3], [6], [5, 7]] cmp: 0
P [2, 1] tc 2, [4, 8] W [4, 8]
   C [2, 1, 4] partion: [[2], [1], [4], [8], [3], [6], [5], [7]] cmp: 0
   P [2, 1, 4] LEAF
   B [2, 1, 4] to: []
           MCR: [1, 3] old W: [3, 6] W: [3] tc 0, [1, 2, 3, 4, 5, 6, 7, 8] W [3] partion: [[3], [5, 6, 7], [2], [1, 4, 8]] cmp: 0
   P [3] tc 1, [5, 6, 7] W [5, 6, 7]
C [3, 5] partion: [[3], [5], [6, 7], [2], [4], [1, 8]] cmp: 0
P [3, 5] tc 2, [6, 7] W [6, 7]
C [3, 5, 6] partion: [[3], [5], [6], [7], [2], [4], [1], [8]] cmp: 0
P [3, 5, 6] LEAF
B [3, 5, 6] to: []
R [] MCR: [1] old W: [] W: []
P [] tc 0, [1, 2, 3, 4, 5, 6, 7, 8] W []
B [] to: PARENT
   Canonical Label: Path: [1, 2, 4] Permutation: [[4, 3, 6, 5, 7, 8]]
  Automorphism: Path: [1, 2, 8] Auto Generator: [[8, 4], [7, 5]]

Automorphism: Path: [1, 4, 2] Auto Generator: [[4, 2], [5, 3]]

Automorphism: Path: [2, 1, 4] Auto Generator: [[2, 1], [3, 6]]

Automorphism: Path: [3, 5, 6] Auto Generator: [[3, 1, 5, 2, 6, 4], [7, 8]]
   Number of Nodes in Tree: 13 Total Processing Steps: 20
```