```
DeclareGroup[G_Symbol, S_n_] := Module[{α, β, e},
  G /: Ord[G] = n!;
  G /: Elements[G] =
   PermutationCycles /@ (Permutations@Range@n);
  Do[G /: g[G, α] = e = Elements[G][[α]];
   G /: ind[G, e] = α,
   {α, Ord[G]} ];
  Do[G /: m[G, α, β] =
     ind[G, g[G, α]~PermutationProduct~g[G, β]],
   {α, Ord[G]}, {β, Ord[G]} ];
  Do[G /: inv[G, α] =
     ind[G, InversePermutation[g[G, α]]],
   {α, Ord[G]} ] ]
```