

PermutationConjugation[a, g] gives the
conjugation of the permutations a and g by evaluating gag^{-1}

```
PermutationConjugation[a_List, g_List] :=  
  PermutationConjugation[a, g] =  
    PermutationProduct[g, a, InversePermutation@g] ;
```