

Pensieve Header: The GPV Algorithm; work in progress.

```
<< KnotTheory`
```

Loading KnotTheory` version of April 20, 2009, 14:18:34.482.  
Read more at <http://katlas.org/wiki/KnotTheory>.

The sample gc below was studied at <http://katlas.math.toronto.edu/drorbn/bbs/show?shot=Roukema-090518-213820.jpg>

```
gc = GC[Ar[4, 1, 1], Ar[2, 5, 1], Ar[6, 8, 1], Ar[3, 7, -1]]
GC[Ar[4, 1, 1], Ar[2, 5, 1], Ar[6, 8, 1], Ar[3, 7, -1]]

P[gc_GC] := Module[
  {n = Length[gc], k, currentarrow, currentdir},
  For[k = 1, k < 2 n, ++k,
    {{currentarrow, currentdir} = DeleteCases[Position[gc, k], {_, 3}];
    If[currentdir == 2 && gc[[currentarrow, 1]] > k,
      vjgfrku
    ]
  ]
]

n = Length[gc]
4

otherend = Table[0, {2 n}];
gc /. Ar[i_, j_, s_] => (otherend[{{i, j}}] = {j, i});
otherend
{4, 5, 7, 1, 2, 8, 3, 6}

DeleteCases[Position[gc, 5], {_, 3}]
{{2, 2}}
```