Pagerank.mrql

```
// preprocessing: for each node, group its outgoing links into a bag
graph = select (key,n#1)
          from n in source(binary,"graph.bin")
        group by key: n#0;

store graph_size := count(graph);

// damping factor
factor = 0.85;

select < node: x.id, rank: x.rank >
from x in (repeat nodes = select < id: key, rank: 1.0/graph_size as double, adjacent: al >
                            from (key,al) in graph
            step select (< id: m.id, rank: n.rank, adjacent: m.adjacent >,
                          abs((n.rank-m.rank)/m.rank) > 0.1)
                  from n in (select < id: key,
                                       rank: (1-factor)/graph_size+factor*sum(select x.rank from x in c) >
                               from c in ( select < id: a, rank: n.rank/count(n.adjacent) >
                                             from n in nodes, a in n.adjacent )
                              group by key: c.id),
                      m in nodes
                 where n.id = m.id
            limit 10)
order by x.rank desc;
```