

CS5644  
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## Assignment 5

Class Mapper

```
def map(key, value):  
    //key: name or id of parsed dataset (or document); value: text of the dataset;  
    for nodes in value:  
        emit(nodes.name, nodes.connected_node)  
        //nodes.name is the name or id of a particular node;  
        //nodes.connected_node is a single neighbor node that is  
        connected to //the nodes (which have nodes.name as the name of  
        the node)  
        //if node A is connected to 3 nodes that will result in 3 return values.
```

Class Reducer:

```
def reduce(key, value):  
    //key: name of a node, value: an iterator over counts from group by key.  
    Result = 0;  
    for count v in value:  
        Result = result + 1  
    emit (key, result)
```