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# tf_idf.prl

$idf{'dog'} =2.5;
$idf{'cat'} =1.6;
$idf{'year'}=3.3;

$tf{'dog'}{'D001'} =10;
$tf{'dog'}{'D002'} = 3;
$tf{'dog'}{'D005'} =22;
$tf{'dog'}{'D009'} = 7;
$tf{'cat'}{'D002'} =14;
$tf{'cat'}{'D005'} =13;
$tf{'cat'}{'D009'} = 6;
$tf{'year'}{'D003'}= 9;
$tf{'year'}{'D005'}= 8;
$tf{'year'}{'D007'}=10;
$tf{'year'}{'D009'}= 2;
$tf{'year'}{'D010'}= 2;

# IDFを表示する
print "=== IDF ===\n";
foreach $term(sort keys %idf){
    print "idf($term)=$idf{$term}\n";
}
print "\n";

# TFを表示する
print "=== TF ===\n";
foreach $term (sort keys %tf){
    foreach $docid (sort keys %{$tf{$term}}){
        print "tf($term,$docid)=$tf{$term}{$docid}\n";
    }
}

print "\n";

# TF*IDFを表示する
print "=== TF*IDF ===\n";
foreach $term (sort keys %tf){
    foreach $docid (sort keys %{$tf{$term}}){
        $tfidf=$tf{$term}{$docid}*$idf{$term};
        print "tf*idf($term,$docid)=$tfidf\n";
    }
}

```