

### The Twist to COP 3502 Program 5 (4/8/04)

I apologize for getting this out late (just as a client would do =))

Often times, a search engine may tally the number of times a particular source is queried, for statistical purposes. (Eventually, the statistics could be used to serve the customers better.) Your added task will be to keep track of the number of times each book is "hit" by a query. (For a book to be "hit" by a query, it must ONLY score positive points for a query. Thus, if a book scores positive points on a particular query, but isn't in the top five for that particular query, you will still count that book as being queried.) For each of these hits, for each book, you will also keep track of the average score per "hit." (Notice that this is NOT an average score per query. You will add up all the points earned by the book from each "hit" and divide by the total number of "hits" the book received.) Display this average score as a real number rounded to two decimal places. Thus, the output to a query will be similar to the following example:

```
Score for this query: 5
Title: The Da Vinci Code
Author: Brown, Dan
Number of hits: 10
Average score per hit: 3.70
```

```
Score for this query: 4
Title: Huckleberry Finn
Author: Twain, Mark
Number of hits: 15
Average score per hit: 2.07
```

```
Score for this query: 2
Title: The Selfish Gene
Author: Dawkins, Richard
Number of hits: 3
Average score per hit: 4.33
```

**Note: You may choose the format of your query output, but your output should include all the information in this sample. Also note that you are only keeping track of the queries to your program during a single run of the program, so none of that information will ever be saved in a file.**