## Solution and example rubric for medium coding:

```
function wordComparison(name, word1, word2)

    fh1 = fopen(name, 'r')

    newname = ['compare_', word1, '_', word2, '.txt']

    fh2 = fopen(newname, 'w')

    line = fgetl(fh1)

    while ischar(line)

        count1 = length(strfind(lower(line), lower(word1))

        count2 = length(strfind(lower(line), lower(word2))

        if count1 > count2

            fprintf('%s\n', word1)

        elseif count1 < count2

            fprintf('%s\n', word2)

        else

            fprintf('equal\n')

        end

        line = fgetl(fh1)

    end

    fclose(fh)

    fclose(fh2)
end
```

## Rubric

15 points total

+1– function header

+1 – open input file

+1 – generate new filename

+1 – open output file

+4 – while loop structure

+2– count number of both words

+1 - compare word counts at all

+1 - compare word counts correctly

+2 - Write line to new file correctly

+1 - Close files