CSCI 132 Practical Unix Programming
Homework 5
Due 11/14/08

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PART 1

Consider a file that consisting of lines that contain a color and an amount separated by colons, like:

```
red:27
yellow:102
green:311
yellow:12
blue:45
```

Write a program that calculates the total amont for each color. The final program, for the above example file, should output (not necessarily in that order):

```
red:27
yellow:114
green:311
blue:45
```

Hint: use a hash data structure where the keys are the colors, and the values are the amounts.
Hint: use the match operator on each line to isolate the color and the amount. You can also use the split function with : being the delimiter.

PART 2

Consider a file that consists of lines like the following:

```
r 1 y 2 g 3 g 4 y 2 r 4 r 3 y 5 y 3 g 3 g 6 g 2 r 1
```

We would like to merge all amounts with the same tag together, **while preserving the order**. For instnce, the following line should become:

```
r 1 y 2 g 7 y 2 r 7 y 8 g 11 r 1
```

Write a program to do that.
Hint: use split and arrays, and check for consecutive tags.

PART 3

Write your own cat command. You should be able to use it as follows (examples)

```
cat -h3 filename    displays the first 3 lines
cat -t5 filename    displays the last 5 lines
cat filename        displays the entire file
```

Hint: what you type at the command line will be in @ARGV. So try to match the first element with something that starts with dash followed by a letter, followed by a number. If so, do what you have to do.

Hint: After you determine what the first element of @ARGV is, you have to remove it form @ARGV if it is not the file name, so that <> will work property.