For this assignment give regular expressions which correspond to the following descriptions. You may use egrep to check your work if you so desire.

1. (2 points) Write a regular expression to match a string of lowercase letters. The must be at least one letter in the string.

2. (2 points) Write a regular expression to match a name. A name consists of two words in a row which begin with upper case letters such as ‘Michael Narayan’. You may assume that all names have the same capitalization and lack of punctuation as ‘Michael Narayan’.

3. (2 points) Write a regular expression to match a string of lowercase letters. The number of letters in the string must be a multiple of 3.

4. (2 points) Write a regular expression to match a string of lowercase letters. The number of letters in the string must not be a multiple of 3.

5. (2 points) Write a regular expression to match a string of 0’s and 1’s which does not contain the substring ‘011’.

Extra Credit. (10 points) Write a regular expression to match a string of digits 0-5 with no repeated digits. Thus 0132 matches and 013241 does not. This is extremely difficult, so only attempt it if you have time. Also, the Honor Code is in effect. Please do not merely copy the answer from the internet. If you want to look for help that’s fine, but DO NOT COPY the answer.