Remarks on recitation assignment 9 - 8 - 09.
You may re-submit recitation 9-8-09 assignment in recitation 9-15-09.

In these remarks I am reporting the data submitted (with proper annotation) by one of your classmates who actually kept track of the order in which each of her 25 subjects chose their 3 spots. It is not required that you keep track of order although it may be germaine to detecting departures from random selction.

The student coded the 15 game piece spots as

$$\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \\ 10 & 11 & 12 \\ 13 & 14 & 15 \end{pmatrix}$$

Here is her data table. Each row represents the *sequence* of selections by a single person from the 15 spots on the game piece. So the first subject chose spot 1 then spot 10 then spot 12.

$$\begin{pmatrix} 1 & 10 & 12 \\ 4 & 7 & 14 \\ 5 & 8 & 11 \\ 4 & 6 & 15 \\ 4 & 5 & 6 \\ 4 & 7 & 10 \\ 13 & 8 & 12 \\ 1 & 4 & 7 \\ 8 & 9 & 12 \\ 4 & 6 & 11 \\ 10 & 9 & 8 \\ 1 & 2 & 3 \\ 5 & 7 & 12 \\ 6 & 15 & 10 \\ 3 & 7 & 12 \\ 2 & 6 & 14 \\ 13 & 14 & 15 \\ 4 & 8 & 13 \\ 9 & 5 & 14 \\ 13 & 9 & 2 \\ 3 & 5 & 12 \\ 7 & 8 & 11 \\ 4 & 7 & 13 \\ 7 & 8 & 9 \\ 2 & 11 & 14 \end{pmatrix}$$

She detected what to her appeared to be non-random behavior on the part of the 25 subjects, things like choosing spots arranged in various obvious patterns around the game piece. If so, that could give us a clue as to how people fill out such forms.

Can we visually detect departures from random play? As an experiment I've created particular graphical portraits of 11 *completely random* 25x3 game piece data sets. Included among them is a similarly made portrait of the student's data. Which one of the 12 do you think visually stands out from the rest?