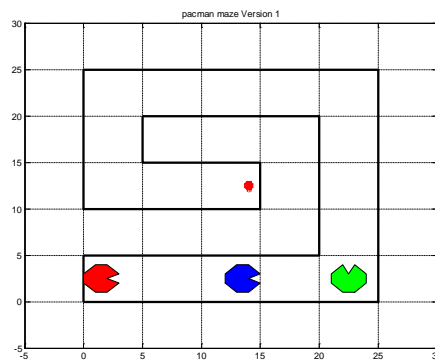


ENGR231 Lab 9
Spring 2016-2017

Create an .m file with the name **lastname_initials_lab9.m** in the cell mode. Upload the published document as a pdf document.

Objective: You are to duplicate the “pacman” plot shown at the bottom with the following constraints

1. Write a function called `trans(dx,dy)` that operates on homogenous coordinates and performs the translation operator. Test your function. Make sure to print out the function and several test vectors in the published document.
2. Do the same as part 1 for a function called `rot(degrees)`. You should have these from last week.
3. Download the mfile called `maze1.m`. Run the file and you should obtain the following figure provided you functions `trans(x,y)` and `rot(theta)` are correct.



4. Modify the code in `maze1.m` to obtain the final packman plot shown at the end. Note: using `pause` (see help) will allow you to see a simple animation if you run the file when completed. READ THE CODE CAREFULLY ESPECIALLY THE COORDINATES OF THE CENTER OF PACMAN.
5. Each “pacman” **must** be a different color (be creative). You **must** stay in the center of the path
6. You must use `trans()` and `rot()` to move the pacman. Hint `trans(dx, dy)` is a relative move.

