* **Variables**: These are labels to represent any kind of data or information you are trying to maintain in your program. It is wise to choose a name for this variable something that makes sense for your use. For Example:
  + A variable called “HP” can have the one of values: 0 – 3 depending on how many times the character has been hit
  + A variable called “IsGameOver” can have the value: True or False, depending on the state of the game.
  + A variable called “highScoreName” can have the value: “Steve”

Data types: Integer, String, Boolean, List

* **Conditionals**: Sometimes, while programming we must check the “conditions” or the state of the system. For example:
  + IF you press left, THEN move the character left
  + IF PacMan eats all the dots, Then the game is over AND you win!
  + IF you lose all your hp, THEN the game is over AND you lose.

\* Practice conditionals with the Color\_Puzzle and the Skywriter\_puzzle

* **Loops**: These do the same thing over and over until a certain condition is met. However, some loops do not end. For Example:
  + Play the theme music FOREVER
  + WHILE the game is NOT over, move the snake forward
  + FOR every ghost that pacman has not yet eaten, Run away from pacman

\*FOR loops, loop over a list of objects like: pacmanGhosts = [inky, blinky, pinky, sue]

* **Functions**: If there is a process that you want to use multiple times (not necessarily over and over like a loop) then it might be good to save the process as a function. For example:
  + Jump() : moves the character up and back down
  + MoveNSteps(n): moves a certain number of steps. As defined by variable “n” provided.

\*Play around with the function blocks in the Tag\_Puzzle. There is a function called move that will move the character a certain number of steps in a particular direction. Put together the puzzle to make the game. What happens if you change the value given to each function?

Look through the Game Avoid\_The\_Bat. Can you figure out how it works?

For each sprite: Can you identify the loops, variables, conditions, and functions? What are they and What do they do?