In this project, I have solved the dog agility problem using **"python-constraint"** library. The clues given to solve the logic puzzle can be defined using this library and then it automatically computes the solution to the problem.

I proceeded as follows:

- First, I defined three variable lists **"breed"**, **"favorite_game"** and **"dog_names"** for the breed of the dog, the game that they like and their corresponding name. Each of these will have one value from **[1,2,3,4]** in the solution set corresponding to the rank the dog achieved in the competition.
- After that, I defined a function called **"same_name_constraint ()"** to assert the constraint that the winning dog shall have same initial letter for name and breed.
- Then, I added **"AllDifferentConstraint ()"** to the variables defined above since no two dogs can have same name, breed, or favorite sport.
- Following this, I added the remaining clues for the solver using **"addConstraint ()'** method.
- Finally, I call the **"getSolutions ()"** method on the **"problem"** object that I created. This gives us all possible solutions for the defined problem.
- The solution is obtained in the form of list of dictionaries. So, I extract the first and the only solution to the problem using sub-scripting.
- Then, I sort the given solution according to the **keys** which are the ranks obtained by the dogs.
- Lastly, I extract the name, breed and the favorite sport corresponding to each rank and print the results.