# Ludobot

## AI Techniques Used

1. We have assigned a number to each token based on how far it is from the goal.

2. We have kept four array that stores its capture potential (kill) and how much danger it is in from opponent.

3. The values in the arrays is based on **probability** and point 1.

4. Based on the values of the arrays we find the best move and play that move.

## Game State

The board is implemented as a 15*15 array. For each token, a cell number is stored which represents the token's position on the board.

## Compiling the Code

The bot is implemented in Java and a *jar* file is created from the same. A python file is created to call the jar file with appropriate arguments.

## *Compiling the java file*

The java file can be compiled using the following commands in succession:

*javac Ludo.java*

*java Ludo*

## *Running the bot*

To run the program, use the python file which will in turn call the jar. It can be done as follows:

*client/client <ip_address_of_server> <port_no> test1.py*