

## Nim's game



This project will make it possible to program an artificial intelligence to play a strategy game. Artificial intelligence must learn strategy by playing.



## 1. How to play Nim's game?

The rules of Nim's game are simple:

- Distribute a batch of matches in a line;
- Each player, in turn, will take one, two or three matches;
- Whoever takes the last match wins.

## 2. Specifications

- You must use 21 cups.
- You will use a 2D list of cup lst\_cup = [[...],...[1, 2, 3], [...]] which will allow the AI to manage cups and the possible values for each of these cups.

## 3. Program

- Learn through failure
- Learn by reward
- Human versus Al
- Al versus Al
- Interface (pygame or others...)