

*Report Assignment 4*  
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Heuristics used in the utility function:

- **stones\_in\_left\_pit**
  - This heuristic encourages the agent to keep stones in the leftmost pit to prevent the opponent from capturing them.
- **stones\_in\_pit**
  - This heuristic encourages the agent to keep as many stones in the pits as possible.
- **non\_empty\_pits**
  - This heuristic encourages the agent to spread stones across multiple pits to make it harder for the opponent to capture them.
- **new\_stones\_in\_store**
  - This heuristic encourages the agent to make moves that result in more stones being placed in the store.
- **new\_stones\_in\_opponent\_store**
  - This heuristic encourages the agent to make moves that don't result in more stones being placed in the opponent store.
- **free\_turn**
  - This heuristic encourages the agent to make moves that result in a free turn.
- **captured**
  - This heuristic encourages the agent to make moves that result in capturing opponent stones.
- **store\_difference**
  - This heuristic encourages the agent to make moves that result in a larger difference between the two stores, as this will result in a higher score for the current player.