# Data for the "Implicit Counterfactual Effect in Partial Feedback Reinforcement Learning" Study

The dataset contains four stimuli coded as {1, 2, 3, 4}. The associations with rewards and the corresponding names in the paper are as follows:

- (A1, B) = (1, 3)
- (A2, C) = (2, 4)

A1 and A2 are associated with rewards from the same distribution, N(64, 13), while B and C are associated with rewards from two different distributions, N(54, 13) and N(44, 13), respectively.

#### **Data Structures**

#### table **learning**:

- Variables: condition, stimLeft, stimRight, action, chosen, rewLeft, rewRight, RT
  - condition: Indicates whether the pair is (1, 3) or (2, 4)
  - **stimLeft:** Stimulus on the left
  - **stimRight:** Stimulus on the right
  - action: Side chosen (1 for left, 2 for right)
  - **chosen:** Name of the chosen stimulus
  - rewLeft: Reward of the left stimulus
  - **rewRight:** Reward of the right stimulus
  - RT: Reaction time of the decision

### table\_transfer:

- Variables: stimLeft, stimRight, action, chosen, conf, RT\_choice, RT\_conf
  - **stimLeft:** Stimulus on the left
  - stimRight: Stimulus on the right
  - action: Side chosen (1 for left, 2 for right)
  - **chosen:** Name of the chosen stimulus
  - conf: Value of confidence

- RT\_choice: Reaction time of choice
- RT\_conf: Reaction time of confidence reporting

## table\_estimate:

- Variables: stim, estimate, RT
  - stim: Stimulus number on the screen
  - **estimate:** Estimated value
  - RT: Reaction time of estimation