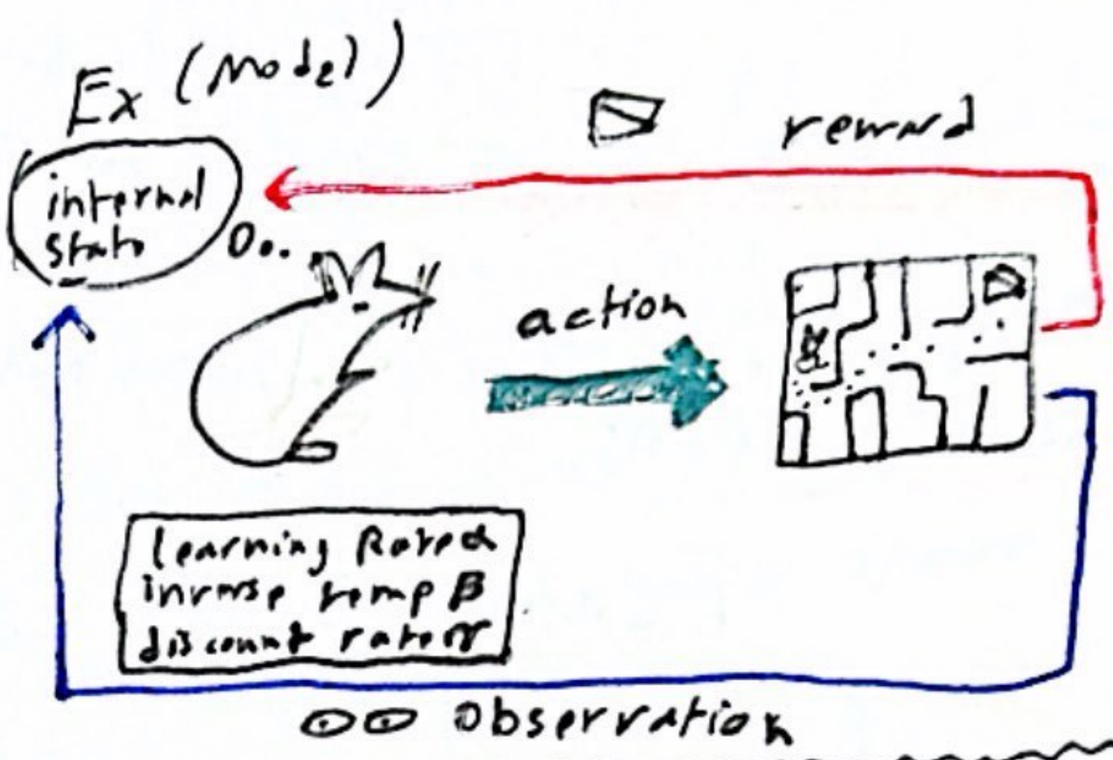
Reinforcement learning (intro)

- a new Branch of ML Different from supervised or unsupervised learning as it operates on a different principal.
instead of learing from pre labeled examples (supervised or finding patterns in unlabeld data (unsupervised) it learns from interaction and feed back

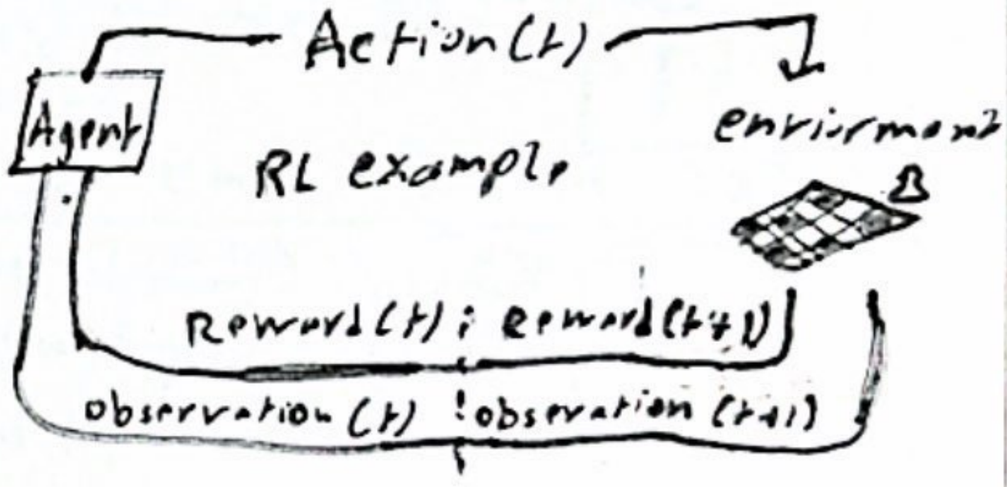
★ unlike supervised learing where Ex's have clear right answers RL is more like training a pet the model
- learns from trail and error
- getting reward for good disions and
- penalized for poor ones

Ex (Model)



Good for: sequential decision making
Game control
Robotic control etc

★ for ex a Reinforcement learning algorithm can learn to play chess by playing 1000's of game against itself. reciving positive reward for for winning moves and neg rewards for loosing ones



Feature (input, indipendent var, predictor var, attr)

- is a specific peice of info or characteristic us.: input for a ML model (any mesurable prop that helps model make prediction)

- there can be many features

Ex's:

Id	name	age	income	marage status
1	Tom	24	81,000	single
2	Dor	41	121,000	married
.	.	.	.	.

Feature

target (aka target topic)

ML algos: ← learn mapping from feature to target 6

Ex: img recognition → 8x8 grid of pixels with # 2

- 64 features with 10 targets/classes (0-9)