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	Stochastic or Deterministic	Sequential or episodic	Static or dynamic	Continuous or discrete	Partially observable or Fully observable	Single agent or Multi agent
Playing soccer.	Stochastic	Sequential	Dynamic	Continuous	Partially observable	Multi agent
Brushing your teeth	Stochastic	Sequential	Static	Continuous	Partially observable	Single agent
Playing a tennis match.	Stochastic	Sequential	Dynamic	Continuous	Partially observable	Multi agent
Practicing tennis against a wall.	Deterministic	Sequential	Static	Continuous	Fully observable	Single agent
Deciding what item to take at hostel lunch	Deterministic	Episodic	Static	Discrete	Fully observable	Single agent

Assumptions:

- 1) In practicing tennis against a wall, I am assuming that it is indoors and not prone to rain or wind.

### Explanation for playing football:

- 1)**Stochastic:** It is stochastic because the subsequent state doesn't depend just on the current state and the agent's actions, but is also dependent on the action of other agents.
- 2)**Sequential:** It is sequential as the current decision of the player affects future decisions and have long-term consequences such as a goal being scored.
- 3)**Dynamic:** It is dynamic because the external environment can change without the intervention of the agent.
- 4)**Continuous:** Soccer is continuous both in time and state as the speed of the ball as well as the direction are continuous.
- 5)**Partially observable:** The decision of the other agents is not completely predictable and hence, the complete state of the environment at each point is not completely observable.
- 6)**Multi-agent:** In soccer, there are multiple agents on the same team as well as on opposite teams. Thus, the game is multi-agent.