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slides!

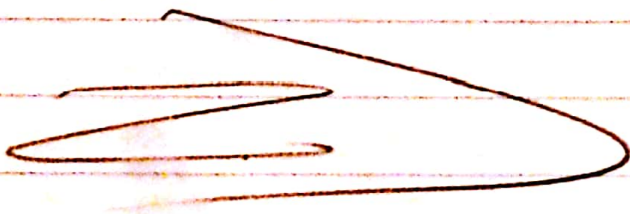
## Ch. 2 : Intelligent agents:-

### \* How agents should act:-

- A rational agent is one that does the right thing.
- Agents interact with environments through sensors and effectors.

\* What is rational at any given time depends on 4 things:-

- ① The performance measure that defines the degree of success
- ② Everything that the agent has perceived so far, it's called the percept sequence.
- ③ What the agent knows about the environment
- ④ The actions the agent performs.





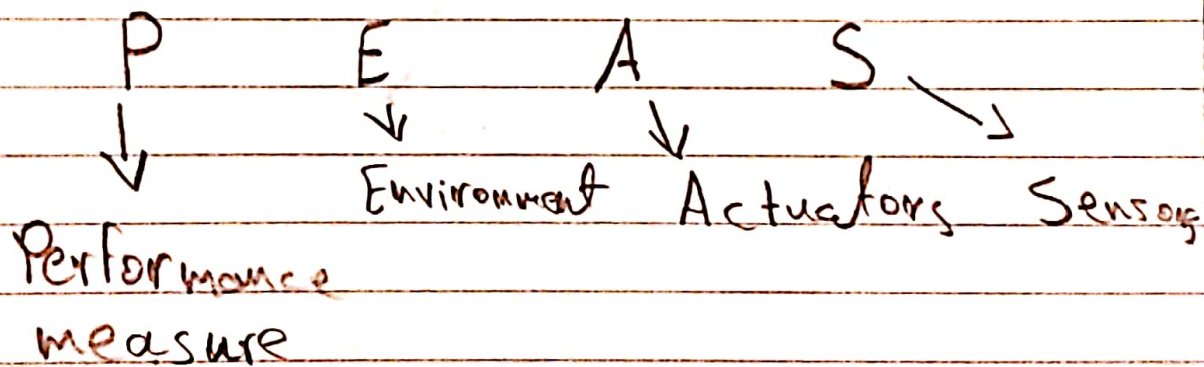
## \* The ideal rational agent :-

- For each possible percept sequence, the agent should do what ever action is expected to maximize it's performance measure, on the basis of the evidence provided by the percept sequence.

This is from the slides  
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## \* PEAS :-

- To design a rational agent, we must specify the task environment.



## \* Environment types :-

- Observable → مشاهد
- Deterministic → حتمي
- Episodic → عرضي
- Static → ثابت
- Discrete → منفصل
- Single-Agent → وكيل واحد

The environment type determines the design of the agent.

The real world is partially observable, stochastic, sequential, dynamic, continuous, multi-agent.



## \* Agent Types :

- ① Simple reflex agents
- ② Reflex agents with state
- ③ Goal-based agents
- ④ Utility-based agents..

↑  
all of these can be turned into learning agents.

## \* Some notes:-

- The agent function determines what the agent does in all circumstances.
- Agent programs implement some agent functions.