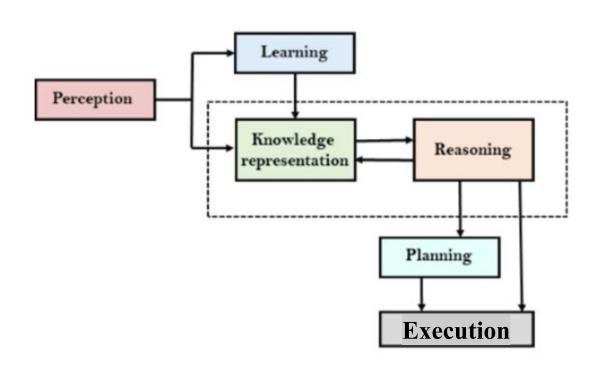
Knowledge Representation System



Knowledge Representation System

- **Perception**: retrieves information from its environment. It can be visual, audio or another form of sensory input.
- The learning component: responsible for learning from data captured by Perception component.
- Knowledge representation and Reasoning: two main components
- These two components are involved in showing the intelligence in machine-like humans. These two components are independent with each other but also coupled together.
- The planning and execution depend on analysis of Knowledge representation and reasoning.

Logical Representation

- Language with some concrete rules which deals with propositions
- Drawing a conclusion based on various conditions
- Consists of precisely defined syntax and semantics
- Each sentence can be translated into logics using syntax and semantics
- Syntax
 - o rules which decide how we can construct legal sentences in the logic
 - o determines which symbol we can use in knowledge representation
 - how to write those symbols
- Semantics
 - o assign a meaning to each sentence

Logical Representation

Propositional Logic Predicate Logic