AI Planning:

STRIPS: (stanford research institute problem solver) : STRIPS is an automated planner develped by Richard and Nilsson in 1971 at SRI international. It is capable of

1. travelling to another location

2. opening closing doors

3. moving objects

Components of STRIP:

a. initial state

b. goal states

c. set of actions (for each action, preconditions and postconditions)

Also, authors of STRIPS introduced a formal planning language that was used as input for the planner.

STRIPS has a significant impact even on today's games.

Partial-Order Planning:

It is total-order planning, which produces an exact ordering of actions. It leaves decisions about the ordering of actions as open as possible. Given a problem in which some sequences of actions is required in order to achieve a goal, a partial-order plan specifies all actions that need to be taken, but specifies an ordering of the actions only where necessary.

NOAH planner pioneered the construction of partially ordered plans. Tate's NONLINE system is another example of the same.

Understanding human thoughts using brain scanner:

Transfer learnings from 'human intelligence and cognition to machine learning and artificial intelligence' to advance objectives such as 'safer autonomous driving, quicker drug discovery, and earlier cancer detection'. It is a tough task and requires a lot of images of the human brain, divided into voxels for analysis. It is being developed by Intel and Princeton University Neuroscience Institute. There is a software also for the bayesian method for reducing bias in neural representational similarity analysis.

References:

1. wikipedia.org/wiki/STRIPS

2. wikipedia.org/wiki/Partial-order\_planning

3. Russell, Stuart and Norvig. Artificial Intelligence: A modern Approach 3rd edition, P. 394-396

4. http://brainiak.org/