

# Summary

## Chap 1

- Do you think AI will take over the world?
- What is AI?
- Important concepts
  - thinking humanly
  - acting humanly
  - thinking rationally
  - acting rationally
- Turing test
- is turing test efficient?
- Rational Agent
- Application of AI
- Is AI related to mathematics? if yes how?
- is AI related to economics if yes how?
- is AI related to neuroscience if yes how?
- is AI related to psychology if yes how?
- is AI related to linguistics? if yes how?
- what is NLP?

## Chap 2

- what is an agent?
- what is an environments
- what is the relation between an agent and environment?
- Agent examples
- write the actions that an agent  $x$  can perform on an env  $y$
- what is a rational agent?
- Accessible vs inaccessible env?
- deterministic vs non deterministic env
- static vs dynamic env
- discrete vs continuous
- write the code for an agent to explore this env

## Chap 3

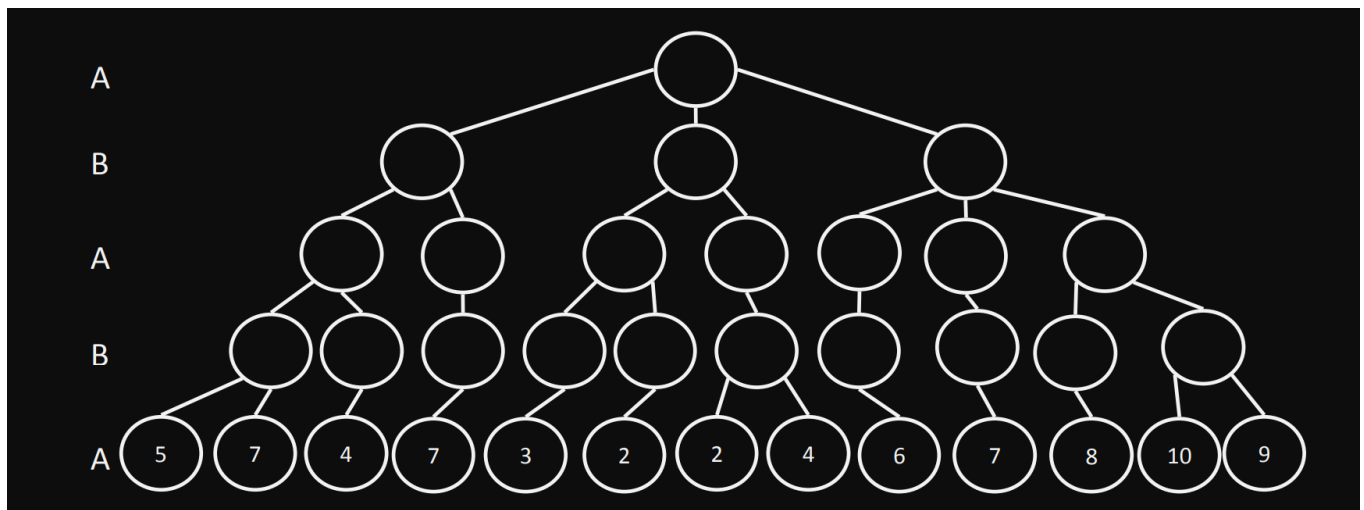
- grid exploration (same coding as in class)
- Breadth first search
- depth search first
- depth limited search
- iterative Deeping depth first search
- bidirectional search
- greedy best first search
- A\*

# Chap 4

- Hill Climbing
- Simulated Annealing
- Beam Search
- Genetic Search
- difference between hill climbing and simulated annealing
- coding could be related to one of those algorithms
- also can ask to write down the result from a graph using one of those algo

# Chap 5

- minimax
- alpha beta pruning



# Chap 6

- Map colouring
- Cryptarithmic
- what is backtracking?
- what is forward checking?