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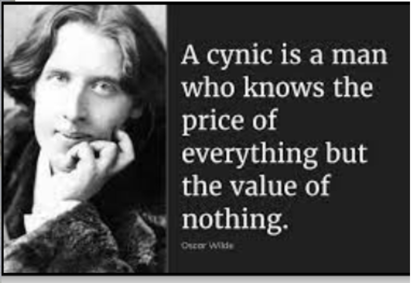
A cynic is a man who knows the price of everything but the value of nothing.

Oscar Wilde

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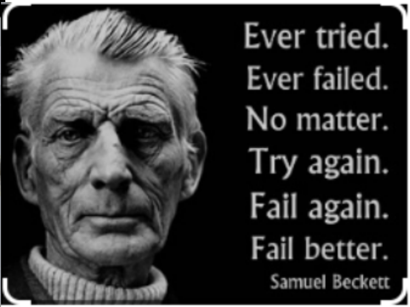

Ever tried.
Ever failed.
No matter.
Try again.
Fail again.
Fail better.

Samuel Beckett

Arcs and goals at minimal costs

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search(Node) :- goal(Node).
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$$1 + b + b^2 + b^3 + \cdots + b^n = \sum_{k=0}^{n} b^k = \frac{b^{n+1} - 1}{b - 1}$$

since $s_n + b^{n+1} = 1 + bs_n$

$$= 2^{n+1} - 1 \text{ for } b = 2$$

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  nodes of depth $\leq n$.
- FSM `accept` is depth-first:

  n arcs from [q0,[$a_1 \cdots a_n$]] to [q,[]] for final q.

  Prolog also searches depth-first (for speed).

Estimating the cost of a path to a goal

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  approximate reward
  $$H = \lim_{n \to \infty} H_n$$
  by looking n steps ahead H_n
  — learning by incrementing n