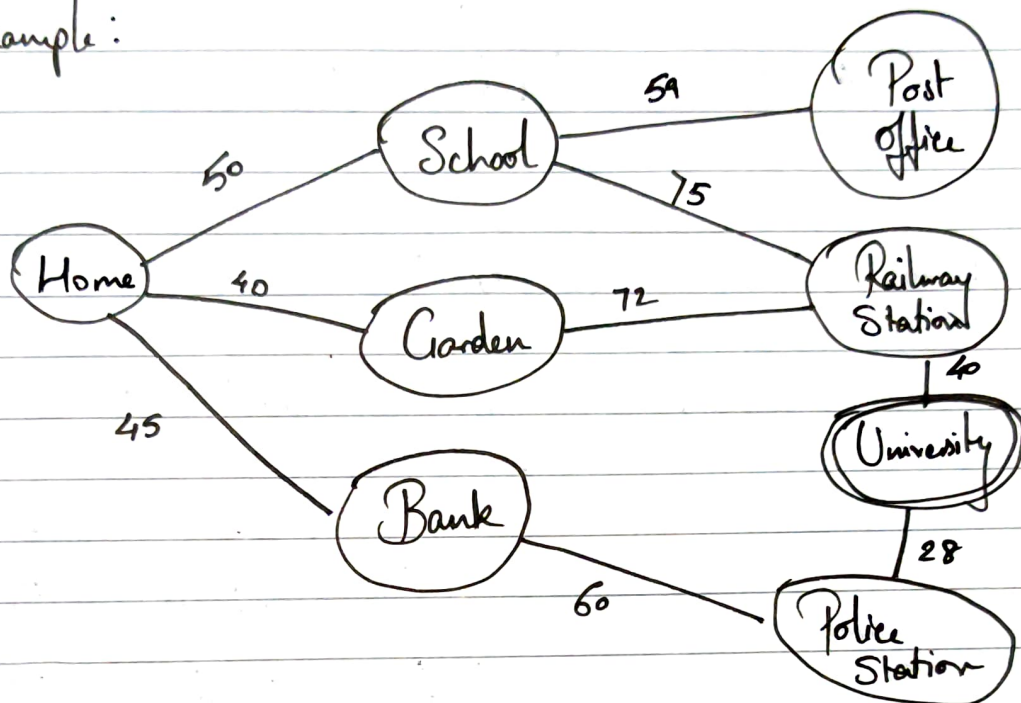


## \* A\* Search

Example:



Initial State = Home  
Goal State = University

$$F(n) = \underset{\substack{\text{dist.} \\ \text{start to} \\ \text{current}}}{G(n)} + \underset{\substack{\text{dist.} \\ \text{current to} \\ \text{final.}}}{H(n)}$$

Heuristic Values:

Home = 120	School = 70
Bank = 80	Police Station = 26
Garden = 100	Railway Station = 20
Post Office = 110	

→ Solution:

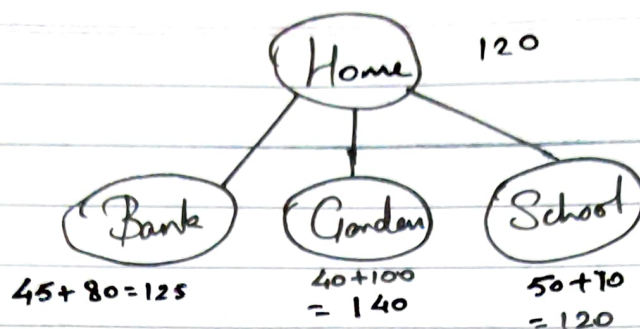
Step 1:

$F(n)$  for (Home)

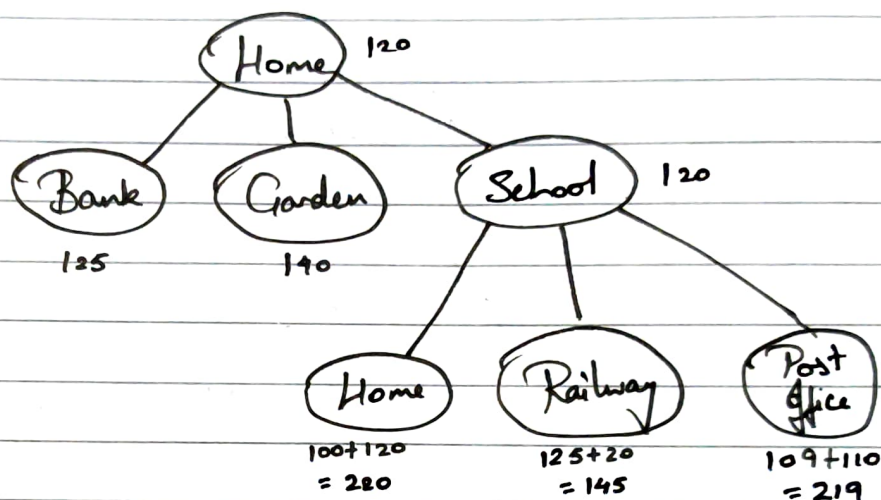
$$= 0 + 120$$

$$f(n) = 120$$

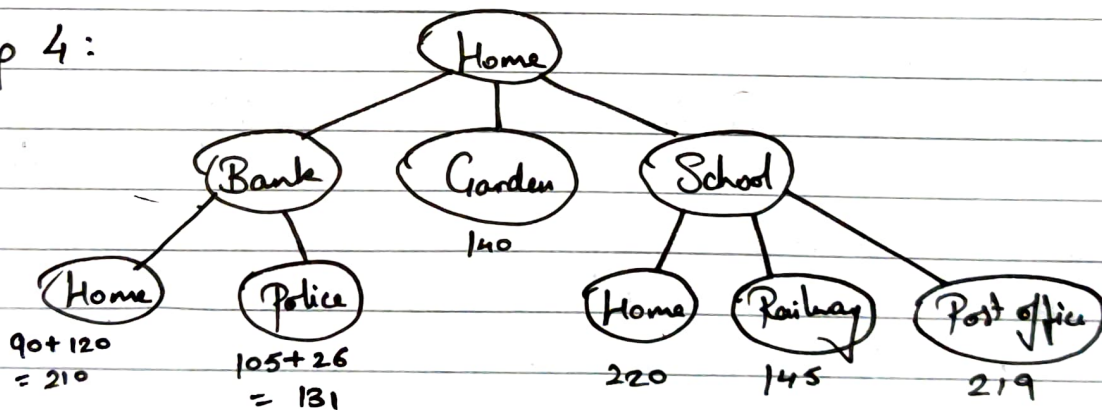
Step 2:



Step 3:



Step 4:



Step 5:

