Max path sum
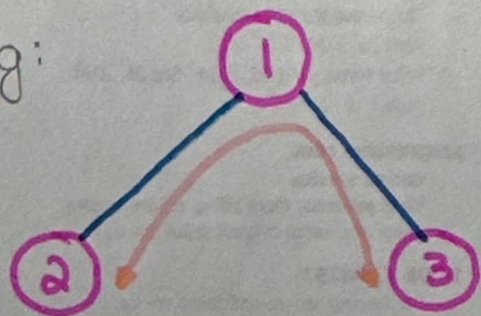
→ path = sequence of connected node

→ sum path = sum of nodes in the path
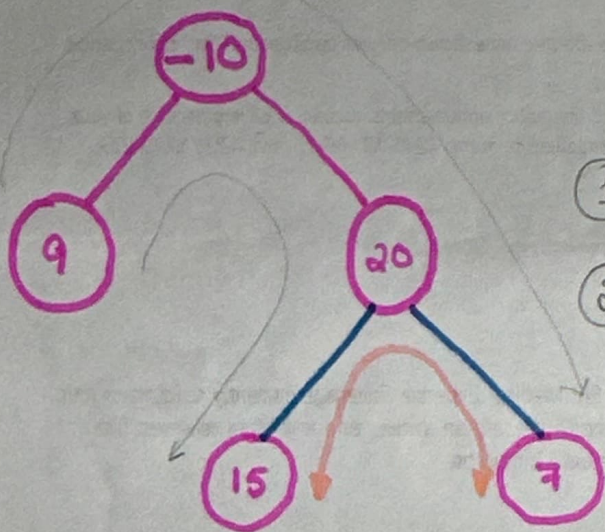
Eg:

paths can be

$$2 \to 1 \to 3 \quad \text{or}$$

$$3 \to 1 \to 2$$

$$\text{max sum} = 2 + 1 + 3 = \underline{\underline{6}}$$

②

paths can be

① $9 \to -10 \to 20 \to 7 = 26$
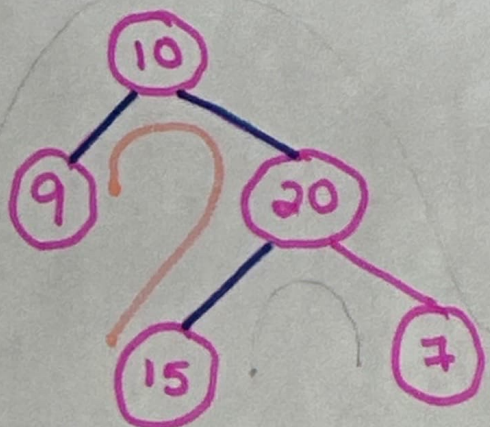
② $9 \to -10 \to 20 \to 15 = 34$

③ $15 \to 20 \to 7 = 42$

max path sum $= \underline{\underline{42}}$

③

Paths can be

① $9 \to 10 \to 20 \to 15 = 54$

② $9 \to 10 \to 20 \to 7 = 46$

③ $7 \to 20 \to 15 = 42$

Max path sum $= \underline{\underline{54}}$

④

Paths

1. $4 \rightarrow 2 \rightarrow -1 = 5$

2. $4 \rightarrow 2 = 6$

3. $2 \rightarrow -1 = 1$

Max path sum = $\underline{6}$