PROBLEM 4.2

Write a program using conditional operators to determine whether the given year is leap year or not

ALGORITHM

- 1. Start
- 2. Declare integer variable year
- 3. Take year as input
- 4. If year is evenly divisible by 4, go to step 5. else, display "not a Leap year"
- 5. If year is evenly divisible by 100, go to step 6. else, display "Leap Year"
- 6. If the year is divisible by 400, Display "Leap year". else, Display "not a Leap year".
- 7. Stop

FLOWCHART

"'mermaid flowchart TD A(Start) \rightarrow B[/Declare integer variable year/] B \rightarrow C[/Take year as input/] C \rightarrow D{If year is evenly divisible by 4} D \rightarrow |False|E[/Display "Not a leap year"/] D \rightarrow |True| F{If year is evenly divisible by 100} F \rightarrow |False| G[/Display "Leap Year"/] F \rightarrow |True| H{If year is evenly divisible by 400} H \rightarrow |True|G H \rightarrow |False|E

$$G \longrightarrow I([Stop]) \to I$$