BIT EXERCISE NO_4 STACK AND QUEUE

Stack question

Q4. Reflect: Why stack fits undo in online forms?

Answer: because when you are filling an online form, each steps you take like typing, deleting is recorded. If you want to undo, the system reverses your recent action first. Stack ensures fair reversal of actions. Like these:

- LIFO (Last In First Out): the last action you take be the first one to be removed when you press undo
- When you press undo the system pops the last activity did
- Each new activity is pushed onto the stack

Queue question

Q4. Reflect: Why FIFO prevents conflict in queue?

Answer: Queue follows the First In First Out rule. Queue removes unfair advantage and allows smooth, free-conflict environment that's why it's mostly used in hospitals, banks, tickets lines. It prevents conflict because:

- Orderly flow: People know their turn will come, reduce pushing, cutting or arguing while waiting
- Fairness: Everyone is treated the same based on arrival time, nobody being cheated on
- Stability/Orderliness: The process is clear and respected each new arrival goes to the back.