GROUP E

1. ADONGO TRACY PAULA M24B38/008 - Presenter
2. ASASIRA ANTHONY M24B13/48 -Project Manager
3. OBOI CHARLES DICKENS M24B13/004 -Secretary
4. IFEMENE PAUL CHUKWUMAOBIM M24B13/034 - Team Developer

*Problem*:

The challenge is to manage patient visits at a health clinic, ensuring that the clinic doesn’t exceed its daily patient capacity. As patients arrive, we need to track the number of patients being admitted and ensure that once the maximum capacity is reached, no more patients can be admitted. Additionally, if the clinic’s capacity isn’t fully utilized, we should display how many more patients can be accepted. The simulation should stop when the clinic reaches its maximum capacity.

*Approach*:

The solution involves creating a JavaScript program that uses a combination of conditional checks and loops. First, an ‘if’ statement checks whether the number of arriving patients exceeds the clinic’s capacity. If it does, a message is displayed notifying that the clinic cannot admit more patients. If the number of patients is within the allowed limit, a ‘while’ loop simulates the admission of patients one by one until the clinic reaches capacity. After all patients are admitted, the program calculates any remaining capacity and informs the user how many more patients can still be admitted, or if the clinic is full. This approach ensures the clinic operates efficiently and prevents overbooking.