

Queue Implementation

Algorithm

- (1) Include all the headers files which are used in the program and define a constant 'SIZE' with specific value
- (2) Declare all the ~~under~~ user defined functions which are used in queue implementation
- (3) Create a one dimensional array with above defined size
- (4) Define two integers variable ($\text{int front} = -1$ and $\text{rear} = -1$)
- (5) The Implement main method by displaying menu of operations list and make suitable functions calls to perform operations
- (6) Check whether queue is full and terminate the function
- (7) if it is Not empty, then increment the front value by one ($\text{front}++$). Then check whether both front and ~~rear~~ ^{rear} are equal

⑧ check wheter queue is empty

⑨ If it is empty, then display Queue is Empty and terminate the function.

⑩ If it is Not ~~Empty~~ ^{empty}, then define an integer variable 'i' and set 'i' = front + 1

⑪ Display queue value and increment value by one.