Implementation of multiple queues using single array :-

Included all the required header files. Following are the various functions that are used in the program :-

1. enqueue() : This function takes as parameter four arrays (int arr[], int front[], int rear[], int next[]), an integer pointer and two integer values. It checks for the overflow condition in the queue (i.e. qn). If the condition for overflow fails then it will insert the item in the corresponding queue and update all the arrays and return to the main function. Else return to the main function simply.
2. dequeue() : This function takes as parameter four arrays (int arr[], int front[], int rear[], int next[]), an integer pointer and an integer value. Basically it deletes an element from the queue with maximum no of elements.
3. display() : This function prints all the elements present in each of the queues and also the front & rear of each queue which are part of the single array.
4. main() : From the main function the program execution starts. As per the user choice the actions are performed.

OUTPUT :-









