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To deal with this assignment, at first, I tried to understand the practice in the iLearn. Then, put all the stuffs needed into the .h file, like SEGMENT, definition of queue, and initial_queue function etc.

Next, I completed the component of the function to fulfill the assigned requirement. Like in the initial_queue function, I reset the memory size of elements, capacity, head, and tail of the queue. In the enqueue and dequeue function, change the value of tail or head separately, while the memory size is too small to use, change the size then reset the head of queue to the beginning position and shift the elements in the queue. But, the memory is sufficient to use, then the memory operation will be conducted in a cyclic way. In the print_queue function, print elements of a queue from the head to the tail and make a newline for every 20 elements. In the is_empty function, return true when the get_size function which gets the size by subtract the head from tail return 0.

At last, fulfill the component in the main function as required. Like enqueue, dequeue, print_queue, capacity, and get_size.