

```
int main (void)
//
        Local Definitions
        QUEUE* queue1;
        QUEUE* queue2;
        int* numPtr;
        int** itemPtr;
//
        Statements
        // Create two queues
        queue1 = createQueue();
        queue2 = createQueue();
        for (int black = 10; black <= 30; black++)
           {
                 numPtr = (int*)malloc(sizeof(black)); // set pointer to memory
                 *numPtr = black;
                 enqueue(queue1, numPtr);
           } // for
        for (int black = 30; black >= 10; black--)
           {
                 numPtr = (int*)malloc(sizeof(black)); // set pointer to memory
                 *numPtr = black;
                 enqueue(queue2, numPtr);
           } // for
        printf ("Queue 1: ascending \n");
        printQueue (queue1); // 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
        printf ("Queue 2: descending \n");
        printQueue (queue2); // 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10
        return 0;
```