1. Given is a matrix of NxN integers.

2. The matrix is initialized to random values between 1 and 10 inclusive.

3. The problem is to calculate the distribution of values, i.e., the number of elements that are 1, the number that are 2, etc.

4. Divide the work up among W worker processes (threads). The matrix is shared by the workers. Assume that N is a multiple of W. Divide the matrix into W equal-size strips of N/W rows.
   - Each worker process should first initialize all the elements in its strip of the matrix to random values between 1 and 10, and then calculate the distribution of values for its strip.
   - When all workers have completed their tasks, one of the workers should calculate the final answer and print the results.

5. Use flag variables to synchronize the printing of results. Be careful to avoid read/write interference between the workers as they calculate results for their strips.