TEST 1: The goal is to assess the accuracy of the count-sketch estimations as the number of distinct items (regulated by the interval [left,right]) varies. The values D, W, and K are fixed. You must fill in the following table.

ACCURACY WITH RESPECT TO NUMBER OF DISTINCT ITEMS, USING D=9, W=30, K=10 Use 4 decimal digits for floating points				
[left,right]	**Number of received distinct items in [left,right]**	**Average relative error for items with top-K frequencies**	**True normalized F2**	**Approximate normalized F2**
[1,15000]	15000	0.0121	0.4682	0.4688
[1,10000]	10000	0.0099	0.5198	0.5218
[1,5000]	5000	0.0129	0.5025	0.5050
[1,1000]	1000	0.0051	0.6452	0.6452

TEST 2: The goal is to assess the accuracy of the count-sketch estimations as the number W of columns of the sketch varies. The values D, K and the interval are fixed. Repeat each experiment 3 times. You must fill in the following table.

ACCURACY WITH RESPECT TO NUMBER OF COLUMNS W, USING D=9, K=30, [left,right]=[1,10000] Use 4 decimal digits for floating points and report averages over 3 runs			
W	**Average relative error for items with top-K frequencies. RUN 1**	**Average relative error for items with top-K frequencies. RUN 2**	**Average relative error for items with top-K frequencies. RUN 3**
100	0.0381	0.1728	0.0505
50	0.0973	0.0556	0.0397
20	0.5383	0.3430	2.5544
15	2.4039	7.7274	0.5904

TEST 3: The goal is to assess the accuracy of the count-sketch estimations as K varies. The values D, W and the interval are fixed. Repeat each experiment 3 times. You must fill in the following table.

ACCURACY WITH RESPECT TO K, USING D=9, W=100, [left,right]=[1,10000] Use 4 decimal digits for floating points and report averages over 3 runs			
K	**Average relative error for items with top-K frequencies. RUN 1**	**Average relative error for items with top-K frequencies. RUN 2**	**Average relative error for items with top-K frequencies. RUN 3**
10	0.0023	0.0024	0.0023
50	0.2664	0.1495	0.2607
100	0.5184	1.7078	0.3344
200	1.3944	2.1338	1.5259