Show the contents of the id [ ] array and the number of times the array is accessed for each input pair when you use quick-find, quick-union, weighted quick-union, weighted quick-union path compression, for the sequence of inputs 9-0 3-4 5-8 7-2 2-1 5-7 0-3 4-2.

* Create a new git repository with name ADS-1 and clone to your local system
* Create a folder practice in that repository
* Answer the above problem in a file name problem-1.txt and add it to the folder ADS-1-practice/m1
* Push the repository to GitHub when your answer is done
* Enter the git commit ID in the blank below
* Do not use eval to submit this activity

**Quick Find:**

9,0 0 1 2 3 4 5 6 7 8 0

3,4 0 1 2 4 4 5 6 7 8 0

5,8 0 1 2 4 4 8 6 7 8 0

7,2 0 1 2 4 4 8 6 2 8 0

2,1 0 1 1 4 4 8 6 1 8 0

5,7 0 1 1 4 4 1 6 1 8 0

0,3 4 1 1 4 4 1 6 1 8 0

4,2 4 1 1 4 1 1 6 1 8 0

**Quick Union:**

9,0 0 1 2 3 4 5 6 7 8 0

3,4 0 1 2 4 4 5 6 7 8 0

5,8 0 1 2 4 4 8 6 7 8 0

7,2 0 1 2 4 4 8 6 2 8 0

2,1 0 1 1 4 4 8 6 2 8 0

5,7 0 1 1 4 4 8 6 2 1 0

0,3 4 1 1 4 4 8 6 2 1 0

4,2 4 1 1 4 1 8 6 2 1 0

**Weighted Quick Union:**

9,0 9 1 2 3 4 5 6 7 8 9

3,4 9 1 2 3 3 5 6 7 8 9

5,8 9 1 2 3 3 5 6 7 5 9

7,2 9 1 7 3 3 5 6 7 5 9

2,1 9 7 7 3 3 5 6 7 5 9

5,7 9 7 7 3 3 5 6 5 5 9

0,3 9 7 7 9 3 5 6 5 5 9

4,2 9 7 7 9 3 9 6 5 5 9

**Weighted Quick Union path compression:**

9,0 9 1 2 3 4 5 6 7 8 9

3,4 9 1 2 3 3 5 6 7 8 9

5,8 9 1 2 3 3 5 6 7 5 9

7,2 9 1 7 3 3 5 6 7 5 9

2,1 9 7 7 3 3 5 6 7 5 9

5,7 9 7 7 3 3 5 6 5 5 9

0,3 9 7 7 9 3 5 6 5 5 9

4,2 9 7 7 9 3 9 6 5 5 9