Activity - 7

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

QUICK-FIND

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

[0, 1, 2, 3, 4, 5, 6, 7, 8, 0] - (9-0)

[0, 1, 2, 4, 4, 5, 6, 7, 8, 0] – (3-4)

[0, 1, 2, 4, 4, 8, 6, 7, 8, 0] – (5-8)

[0, 1, 2, 4, 4, 8, 6, 2, 8, 0] – (7-2)

[0, 1, 1, 4, 4, 8, 6, 1, 8, 0] – (2-1)

[0, 1, 1, 4, 4, 1, 6, 1, 1, 0] – (5-7)

[4, 1, 1, 4, 4, 1, 6, 1, 1, 4] – (0-3)

[1, 1, 1, 1, 1, 1, 6, 1, 1, 1] – (4-2)

QUICK-UNION

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

[0, 1, 2, 3, 4, 5, 6, 7, 8, 0] - (9-0)

[0, 1, 2, 4, 4, 5, 6, 7, 8, 0] – (3-4)

[0, 1, 2, 4, 4, 8, 6, 7, 8, 0] – (5-8)

[0, 1, 2, 4, 4, 8, 6, 2, 8, 0] – (7-2)

[0, 1, 1, 4, 4, 8, 6, 2, 8, 0] – (2-1)

[0, 1, 1, 4, 4, 8, 6, 2, 1, 0] – (5-7)

[4, 1, 1, 4, 4, 8, 6, 2, 1, 0] – (0-3)

[4, 1, 1, 4, 1, 8, 6, 2, 1, 0] – (4-2)

WEIGHTED QUICK-UNION

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

[9, 1, 2, 3, 4, 5, 6, 7, 8, 9] - (9-0)

[9, 1, 2, 3, 3, 5, 6, 7, 5, 9] – (3-4)

[9, 1, 2, 3, 3, 5, 6, 7, 5, 9] – (5-8)

[9, 1, 7, 3, 3, 5, 6, 7, 5, 9] – (7-2)

[9, 7, 7, 3, 3, 5, 6, 7, 5, 9] – (2-1)

[9, 7, 7, 3, 3, 7, 6, 7, 5, 9] – (5-7)

[9, 7, 7, 9, 3, 7, 6, 7, 5, 9] – (0-3)

[9, 7, 7, 9, 3, 7, 6, 7, 5, 9] – (4-2)

WEIGHTED QUICK-UNION WITH PATH COMPRESSION

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

[9, 1, 2, 3, 4, 5, 6, 7, 8, 9] - (9-0)

[9, 1, 2, 3, 3, 5, 6, 7, 5, 9] – (3-4)

[9, 1, 2, 3, 3, 5, 6, 7, 5, 9] – (5-8)

[9, 1, 7, 3, 3, 5, 6, 7, 5, 9] – (7-2)

[9, 7, 7, 3, 3, 5, 6, 7, 5, 9] – (2-1)

[9, 7, 7, 3, 3, 7, 6, 7, 5, 9] – (5-7)

[9, 7, 7, 9, 3, 7, 6, 7, 5, 9] – (0-3)

[9, 7, 7, 9, 3, 7, 6, 7, 5, 9] – (4-2)