

Weighted Quick Union with Path Compression

Graph:

Here we observe that the actual, that is, practical values that I ran and got these results are slightly higher than the theoretical values that should be achieved.

I ran the code for different values of 'n', I took a total number of 10 different values and ran the code .

The relation that professor concluded of the Union Find client was

Number of pairs(Connected) = $\frac{1}{2} n \log n$

Values calculated and after that I generated this graph with expected values v/s the experimental values.

