Laboratory practice No. 5: Divide to conquer and dynamic programming

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3) Practice for final project defense presentation

3.1 First, we need to get the origin vertex and then, create the iterations from the first vertex to every other vertex in the different possible orders. We calculate the routes and save them in a matrix. After doing that, we start going from the bottom to the top and getting the minium value to get from that last vertex to the first one
3.2 50! (factorial)
3.3 and 3.4 Using a recursive algorithm where we take the position of karoline: when shake takes a trash, her position will be replaced with the position of the trash and the cost is Math.abs(the position in x of the trash - her position in x + the position in y of the trash - her position in x) so we can say she is clearing the world.
3.5 O(xyLogxy)
3.6 x= is the world length in x, y is the world length in y

4) Practice for midterms

4.2.1 O(lenx*leny)
4.2.2 table[lenx][leny]

4.5.1 c= T(n)=T(n/2) + C that is O(log n)
4.5.2 a[mitad]
4.5.3 a,mitad+1,de,z

4.6.1 scm[i]=1
4.6.2 scm[i] = 1 + scm[j]
4.6.3 max = scm[i]
4.6.4 c) O(n^2)

4.7.1 d[i][j]
4.7.2 d[k][j]
4.7.3 d[i][k]
4.7.4 O (n^3)