The above point now leads up to a follow up question:

"As recursion to the parent and also a pre-require to apply the technique of dynamic programming, how does one identify that recursion can be applied to a specific problem.?"

Some ways one can identify that recursion can be applied to a problem are as follows:

in majorety of such problems one could easily spot a notion of "choice" being pre-dominantly present in the problem. For instance one could think of the following scanario as a recursive problem:

a) Your current location is "X".
b) Your destinations location is "Y"
c) Your goal is to reach your destination
i.e X-> Y.

We can say stanting at "X" we can make miltiple. choices to going from X=X1, X=X2, X=X3 and then from X1, X2 8X3 we can make more such "choices"

The same of the sa