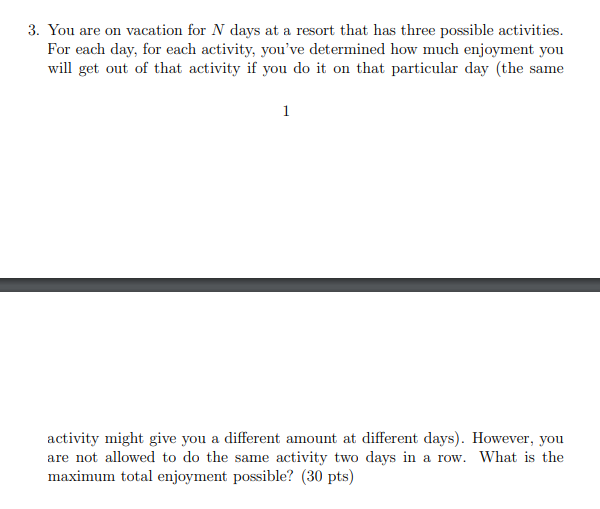
ASSIGNMENT4 QUESTION3



**Answer:**

For each day and have three possible activities to do. J = 1, 2 ,3 .

Let  represent the maximum enjoyment up to day and do activity on day .

Let represent the enjoyment do activity on day .

Solve the subproblems in the order P(1, J), . . . , P(N, J). For j = 1, 2, 3

For all we have:

And we have Base case:

The final solution will be given by

The time complexity for this solution will be since we will compute for each activity for N days.