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CS 324 HW 6: Dynamic Programming & Greedy Algorithms

Part A (20 points): can be done individually or in pairs, pairs preferred

- 1. (15 points) Upload your code file to the separate moodle submission link. If you worked with a partner, put both names above and in the code comments.
- 2. (2 points) What are the returned values for the test arrays above for the recursive solution? Include a screenshot of your results below.
 - a. True/False
 - b. True/False
 - c. True/False
 - d. True/False

```
PS C:\Users\BamBam\OneDriveUP\OneDrive - University of Portland\2020 Spring\cs324\hw6\cs324-hw6a> python .\equal_partiton.py
[3, 1, 5, 9, 12]
should be true: True
[10, 7, 4, 8]
should be false: False
[4, 5, 1, 11, 10, 3]
should be true: True
[4, 5, 6, 11, 120, 4]
[5, 5, 6, 11, 120, 4]
[6, 5, 6, 11, 120, 4]
[7]
should be false: False
```

- 3. (1 point) Do your answers with the dynamic programming version match that of the recursive version?
 - a. Yes/No

Yes

4. (2 points) Copy and paste your table from test case 3 {4, 5, 1, 11, 10, 3} below.

```
[True, True, True, True, True, True]
[False, False, False, True, True, True, True]
[False, False, False, False, False, False]
[False, False, False, False, False, True]
[False, True, True, True, True, True]
[False, False, True, True, True, True, True]
[False, False, False, True, True, True, True]
[False, False, False, False, False, True]
[False, False, False, False, False, True]
[False, False, True, True, True, True, True]
[False, False, False, True, True, True, True]
[False, False, False, True, True, True]
[False, False, False, True, True, True]
[False, False, False, False, False, True]
[False, False, False, False, True, True]
[False, False, False, True, True, True]
[False, False, False, True, True, True]
[False, False, False, True, True, True]
```