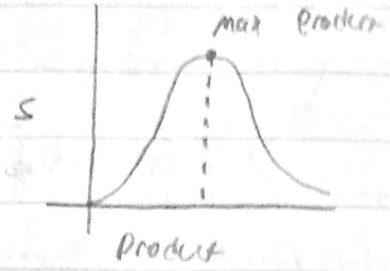
Integer Break

n = 10 output = 36 why? 3+3+4 = 10 3×3×4 = 36

n = 7 output = 12 why? 2×3×2 = 12 2+3+2 = 7

By doing examples, instead of creating a list of size n to store previous answers, we only need ½n, one here's why



by utilizing ½n size list, we set the max product at the end of list, or (off by 1 index)

n = 9

list = [0] * 9//2 = [0, 0, 0, 0]

because with 0 nums, easier if 0 with 1 number, answer is that #

the first 2 will always be [0, n] → [0, 9, 0, 0]

the we populate list by subtracting n - (int) n/i until n = 0

list[2] = 9//2 = 4
5//1 = 5 → multiply = 20 list[2] = 20 [0, 9, 20, 0]
0 → Stop

list[3] = 9//3 = 3
6//2 = 3
3//1 = 3 → multiply = 27 list[3] = 27 [0, 9, 20, 27
0 → Stop