

1. Idea:

- Tree
- depth first
- possible later optimization with parallel divide and conquer
- if legal leaf is reached → add to set `HashSet<u32 x 8>`
- use structure here to aggregate the different coins to a bag

2. Idea

Dynamic programming:

- from size 1 to n
- using the old solutions when possible → `HashMap` with `<left_size, possible_combinations_to_fill>`
- else expand like a node
- use iteration instead of recursion:
- use work stack
 - if empty push 1 to n on it
 -

!! the problem here is that that the DIFFERENT ways are on interest

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2		2		3		4		5		6		7		8		9		10	11
5				4						10					18				29
10																			

20*1

18*1+1*2

..

2*1 + 8*2

10*2

4*5

3*5 + {1*2+3*1, 2*2+1*1, 5*1} = 3

2*5 + {10*1,... 5*2} = 6

1*5 + {15*1+0*2, 1*1+ 7*2} =8

== 11