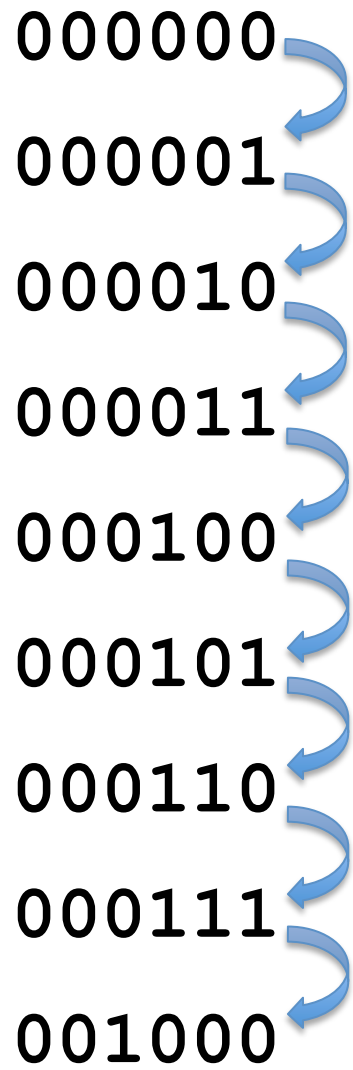


000000
000001
000010
000011
000100
000101
000110
000111
001000

A vertical list of nine binary strings, starting with 000000 at the top and ending with 001000 at the bottom. Each string is connected to the one immediately below it by a blue, curved arrow pointing downwards. The strings represent the binary values 0, 1, 2, 3, 4, 5, 6, 7, and 8 in decimal.

000000
000001
000010
000011
000100
000101
000110
000111
001000

Pay 1

Pay 2

Pay 1

Pay 3

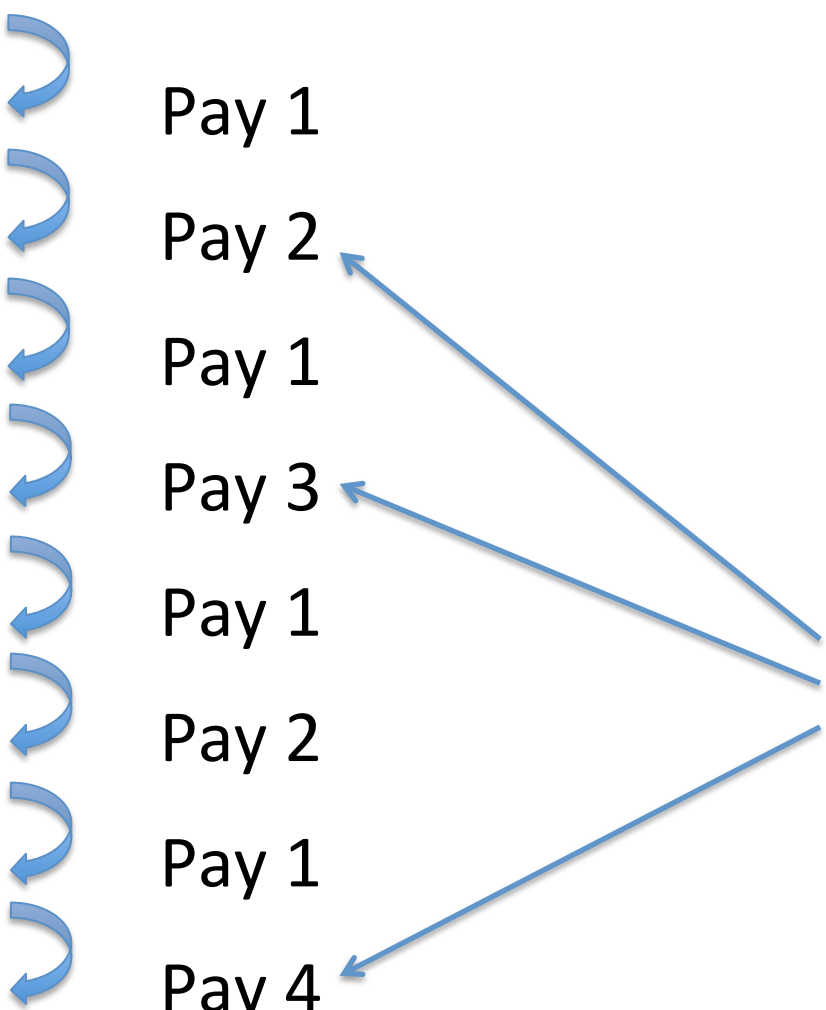
Pay 1

Pay 2

Pay 1

Pay 4

Definitely $O(n)$
worst case



000000			
000001	Reserve 2 pennies	Pay 1	1 in reserve
000010	Reserve 2 pennies	Pay 2	1 in reserve
000011	Reserve 2 pennies	Pay 1	2 in reserve
000100	Reserve 2 pennies	Pay 3	1 in reserve
000101	Reserve 2 pennies	Pay 1	2 in reserve
000110	Reserve 2 pennies	Pay 2	2 in reserve
000111	Reserve 2 pennies	Pay 1	3 in reserve
001000	Reserve 2 pennies	Pay 4	1 in reserve

