

000000
000001
000010
000011
000100
000101
000110
000111
001000



The image displays a vertical list of nine 6-bit binary strings, starting from 000000 at the top and ending with 001000 at the bottom. Each string is followed by a blue, curved arrow pointing downwards to the next string, indicating a sequential progression. The strings represent the first nine values of a 3-bit counter (000 to 100) padded with three leading zeros.

Index	Binary String
1	000000
2	000001
3	000010
4	000011
5	000100
6	000101
7	000110
8	000111
9	001000

000000
000001
000010
000011
000100
000101
000110
000111
001000

Pay 1

Pay 2

Pay 1

Pay 3

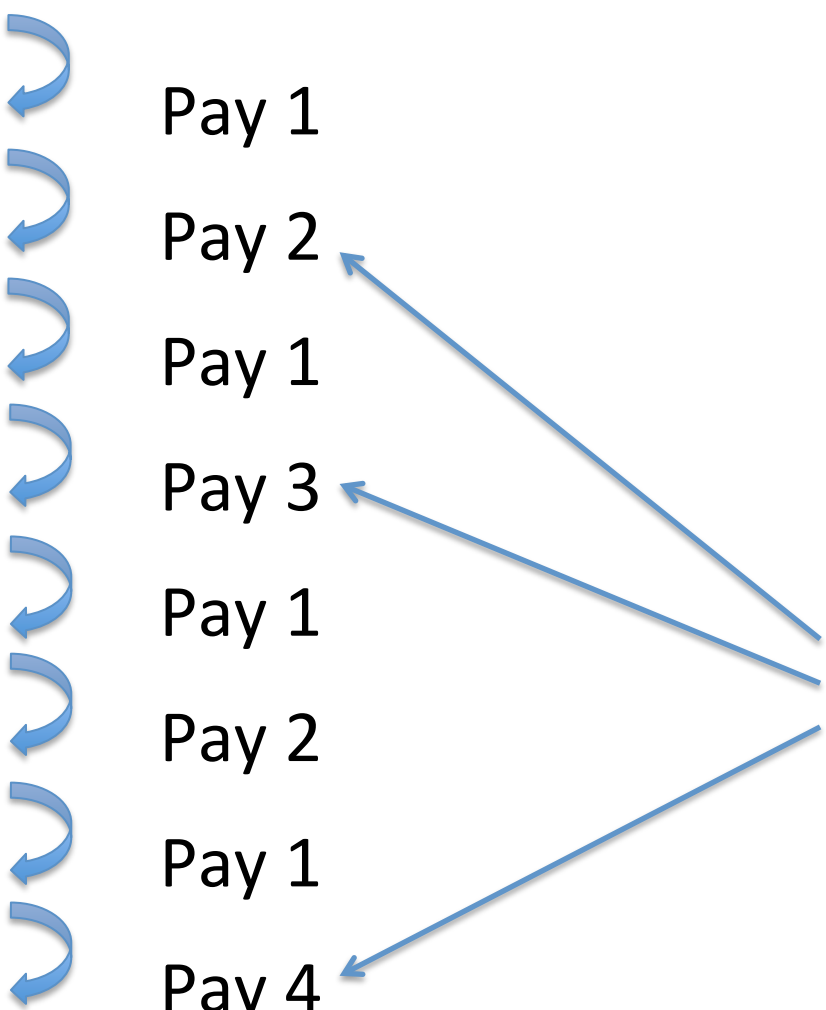
Pay 1

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

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

