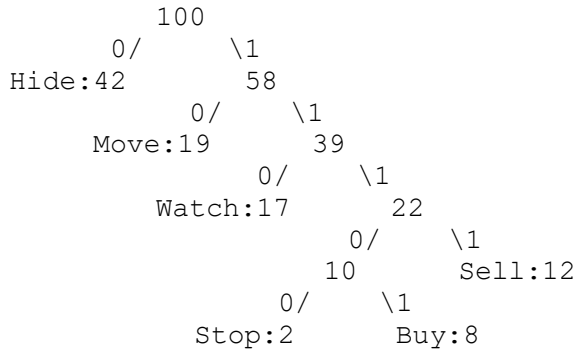
Hide:42, Move:19, Watch:17, Sell:12, Buy:8, Stop:2



Part A

Hide: 0
Move: 10
Watch: 110
Sell: 1111
Buy: 11101
Stop: 11100

Part B

	Hide	Move	Watch	Sell	Buy	Stop
Frequency	42	19	17	12	8	2
Fixed Length	000	001	010	011	100	101
Variable-length	0	10	110	1111	11101	11100

For fixed-length code, we need three bits to represent the 6 different strings. So, if we have 100 words total, we need 3 * 100 = 300 bits total. Using variable-length code, we will need (1 * 42) + (2 * 19) + (3 * 17) + (4 * 12) + (5 * 8) + (5 * 2) = 229 bits. A decrease of 71 bits.