# The Algorithm

Iterative-Compute-Opt

M[-1]= 0

M[0]= 0

for j = 1, 2, . . . , n

M[j]= max(vj + M[j-2], M[j − 1])

endfor

return M[n]

# Proof of Correctness

We will prove by inductions that this returns the optimal answer.