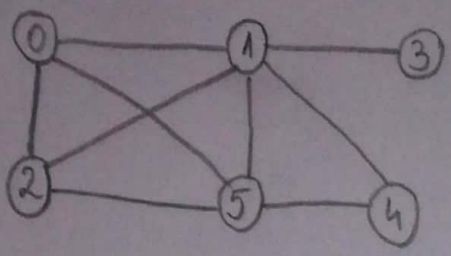

Find a vertex cover of no more than twice the optimal number of vertices.

	x	y	visited
initialization			0 1 2 3 4 5 F F F F F F
iteration 1	0		
		1	0 1 2 3 4 5 T T F F F F → break
iteration 2	1 → it was visited, so we move to the next vertex		
iteration 3	2		
		0 ← visited, we move to the next adjacent vertex	
		1 ← visited, we move to the next one	
		5	0 1 2 3 4 5 T T T F F T
iteration 4	3		
		1 ← visited, so we move to the next vertex	
iteration 5	4		
		1 ← visited, we go to the next adjacent vertex	
		5 ← visited too, we move to the next vertex	
iteration 6	5 ← visited and there aren't more vertices to be processed → STOP		

The vertex cover is formed by the vertices which were visited (visited [x] = True) →

⇒ The vertex cover found by the algorithm contains the vertices : 0, 1, 2, 5.