Approx-Vertex-Cover(G)

1   $C = \emptyset$
2   $E' = G.E$
3   **while** $E' \neq \emptyset$
4   let (u, v) be an arbitrary edge of E'
5       $C = C \cup \{u, v\}$
6   remove from E' edge (u, v) and every edge incident on either u or v
7   **return** C