HOPCROFT-KARP(G)

1    $M = \emptyset$
2   **repeat**
3   let $\mathcal{P} = \{P_1, P_2, \ldots, P_k\}$ be a maximal set of vertex-disjoint
           shortest M-augmenting paths
4         $M = M \oplus (P_1 \cup P_2 \cup \cdots \cup P_k)$
5   **until** $\mathcal{P} == \emptyset$
6   **return** M