

## Cpt S 350 Homework #7

Please print your name!

Let  $G$  be color graph in the sense that it is a directed graph where each node has a color. In particular, there is a designated initial node. An  $\omega$ -path is an infinite walk on  $G$  that starts from the initial.

1. Design an algorithm that decides where there is an  $\omega$ -path on which  $\Box(\text{yellow} \vee \Diamond \text{blue})$  holds.
2. Design an algorithm that decides where there is an  $\omega$ -path on which  $\Box \Diamond(\text{yellow} \wedge \Diamond \text{blue})$  holds.