

Practice Exercise

STRIPS planning

1 Directed Questions

- The STRIPS representation for an action consists of what?
- What is the STRIPS assumption?
- What is the *frame problem* in planning? How does it relate to the STRIPS assumption?
- What are some key limitations of STRIPS?

2 STRIPS planning

Consider a scenario where you want to get from home (off campus) to UBC during a bus strike. You can either drive (if you have a car) or bike (if you have a bike). How would you represent this in STRIPS?

- (a) What are the actions, preconditions and effects? What are the relevant variables?
- (b) If we select the action *goByBike*, what is the value of *haveBike* after the action has been carried out.
- (c) If we are at UBC and select the action *goByCar*, what will the value of *loc* be after the action has been carried out?

3 Learning Goals

You can:

- Represent a planning problem with the STRIPS representation.
- Explain the STRIPS assumption