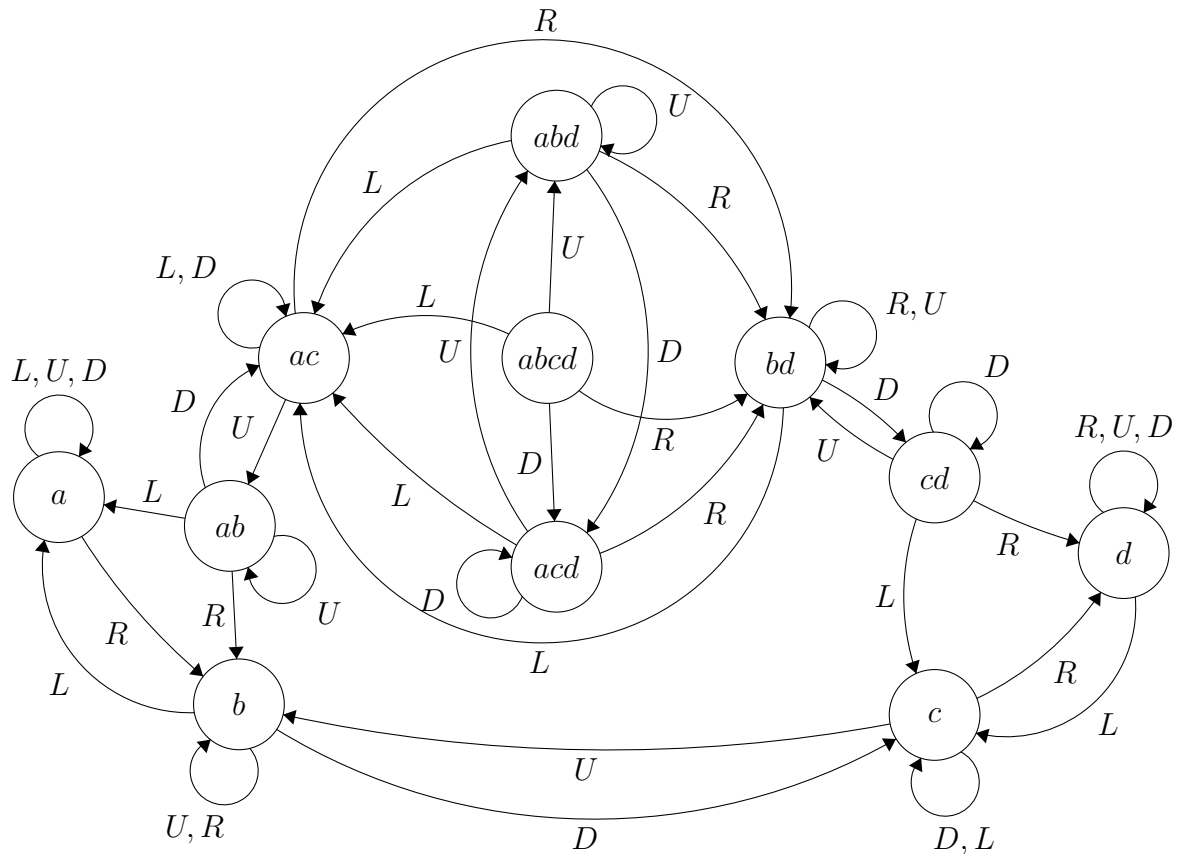# 1

2

a)

b)

As we can see in the graph the fastest way from abcd to get to c is R then D then L. The reason why this is possible is that we can collapse the space of possible states that we are in at a given point in time. This is possible since the goal c is reached independent of the starting position:

In the table we show that this is true:

start	R	D	L
a	b	c	c
b	b	c	c
c	d	d	c
d	d	d	c

All end in position c.

c)

We can collapse the space of possible states by reducing the amount of them until we reach 1. Then we know that we can only be in one specific state and have located our position. From this point on we always know at which position we are solving the sensorless problem.

3 lisp