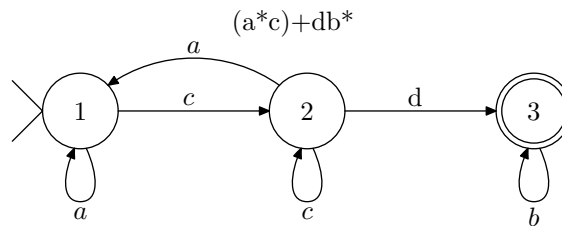


## 1 Perl of great price

```
perl -le 'print "match" if $ARGV[0] =~ /^(a*c)+db*$/ ' cd
```

```
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
match
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
match
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
match
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ perl -le 'print "match" if $A
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$
```

## 2 Circles and lines



## 3 prolog epilogue

```
s --> [a], s.
s --> [c], t.

t --> [c], t.
t --> [a], s.
t --> [d], u.

u --> [b], u.
u --> [].
```

I am still having the darnedest time figuring out to put screenshots into my latex editor so I hope the verbatim text from my terminal suffices as long as I promise to figure it out in any future assignments:

```
rthompson@DESKTOP-EAHC8Q0:~/arizona/hlt538-computational_linguistics/hw6$ swipl
Welcome to SWI-Prolog (threaded, 64 bits, version 9.0.4)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.
```

For online help and background, visit <https://www.swi-prolog.org>  
For built-in help, use ?- help(Topic). or ?- apropos(Word).

```
?- [grammar].
```

true.

?- phrase(s,[c,d]).  
true.

?- phrase(s,[c,c,c,d,b,b,b,b]).  
true  
Unknown action: for help)  
Action?  
Unknown action: [ (h for help)  
Action?  
Unknown action: A (h for help)  
Action? .

?- phrase(s,[a,a,a,a,a,a,a,a,c,d]).  
true.

?- phrase(s,[c,a,a,c,a,a,a,a,c,c,c,d,b,b,b]).  
true .

?- phrase(s,[x,c,d,x]).  
false.

?- phrase(s,[c,a,c,c,a,d,b,b,b,b,b]).  
false.

?- phrase(s,[a,c,d,b]).  
true .

?- phrase(s,[a,c,b,d]).  
false.

?- phrase(s,[a,c,a,a,a,a,c,c,c,b,b,b]).  
false.

?-