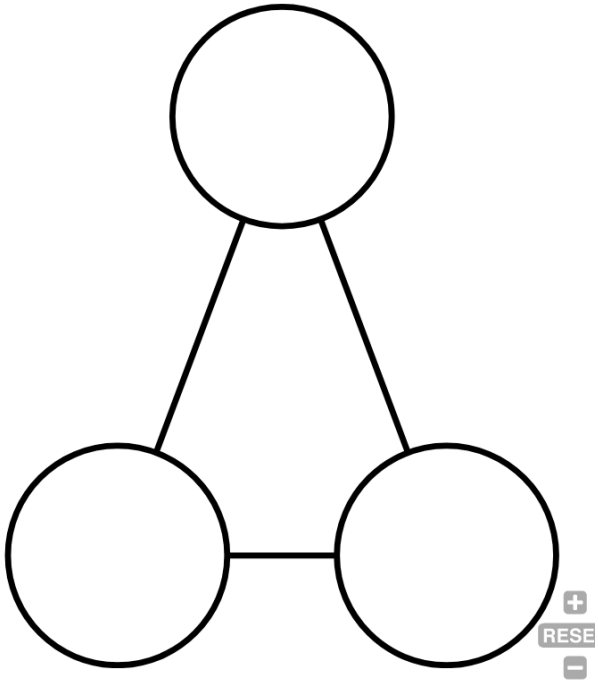
Graphviz Lab Assignment

1.

```
digraph G {
    a [shape=circle, label=""]
    b [shape=circle, label=""]
    c [shape=circle, label=""]

    a -> b [arrowhead="none"]
    b -> c [arrowhead="none"]
    a -> c [arrowhead="none"]

    {rank = same b c }


}
```

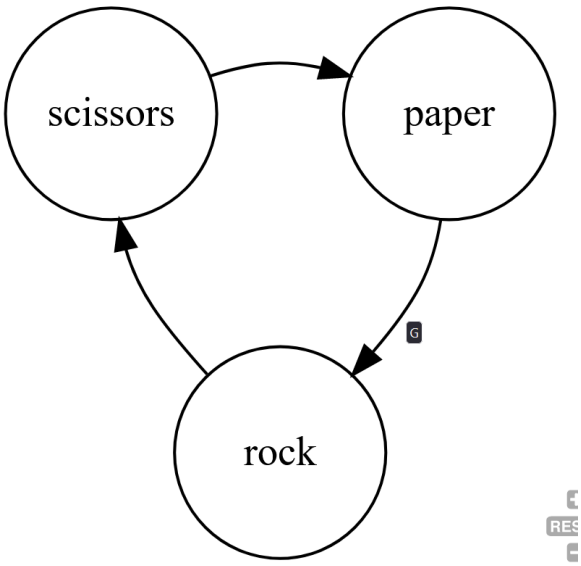
Engine: dot Format: svg Show raw output



2.

```
digraph G {

 graph [layout = neato, overlap = FALSE, outputorder = edgesfirst, splines = curved]

    a [shape=circle, label="scissors" height=1 pos="-.8, .8!"]
    b [shape=circle, label="paper" height=1 pos=".8, .8!"]
    c [shape=circle, label="rock" height=1 pos="0, -.8!"]

    a -> b
    b -> c
    c -> a



    {rank = same a b}
    {rank = source a b}
    {rank = max c}


}
```

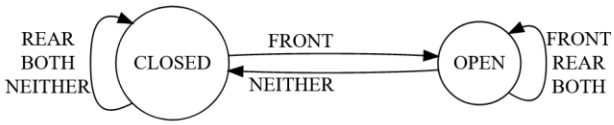
Engine: dot Format: svg Show raw output Download



3.

```
digraph G {

    graph [layout = neato, overlap = FALSE, outputorder = edgesfirst, splines = curved]

    a [shape=circle label="CLOSED" pos="-1.5,0!" height=.75]
    b [shape=circle label="OPEN" pos="1.5,0!" height=.8]

    a -> b [label="FRONT"]
    b -> a [label="NEITHER"]

    a:sw -> a:nw [label="REAR\nBOTH\nNEITHER"]
    b:se -> b:ne [label="FRONT\nREAR\nBOTH"]



}
```

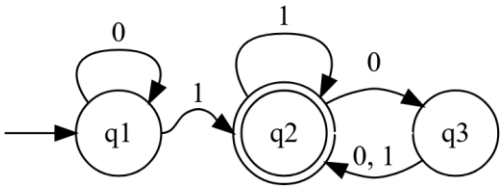
Engine: dot Format: svg Show raw output Download Share



4.

```
digraph G {



    dummy [shape=none label=""]
    a [shape=circle label="q1"]
    b [shape=doublecircle label="q2"]
    c [shape=circle label="q3"]

    dummy -> a
    a:e -> b:w [label="1"]
    b -> c [label="0" ]
    c -> b [ label="0, 1"]
    c -> b [label="0, 1" fontcolor=white color=white]

    a:nw -> a:ne [label="0"]
    b:nw -> b:ne [label="1"]

    {rank = same a b c dummy}


}
```

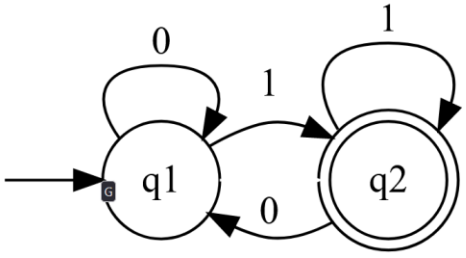
Engine: dot Format: svg Show raw output Download Share



5.

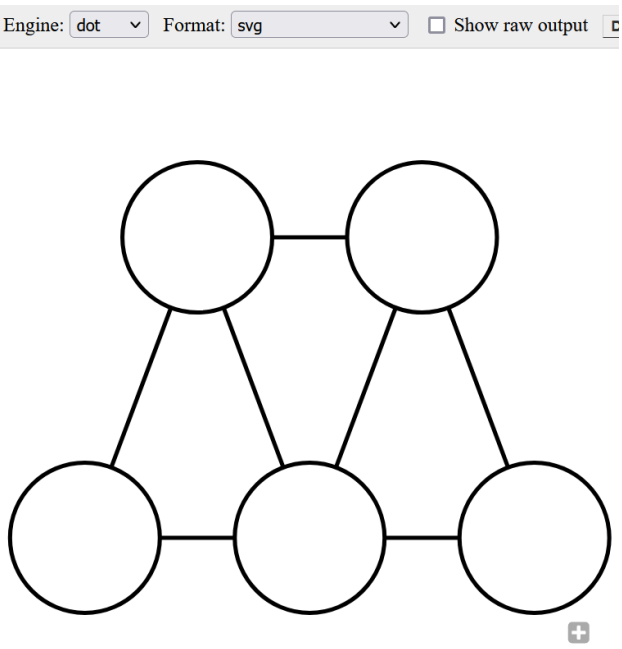
```
digraph G {



    dummy [shape=none label=""]
    a [shape=circle label="q1"]
    b [shape=doublecircle label="q2"]


    dummy -> a
    a -> b [label="1" color=white fontcolor=white]
    b -> a [label="0"]
    a -> b [label="1"]

    a:nw -> a:ne [label="0"]
    b:nw -> b:ne [label="1"]

    {rank = same a b dummy}


}
```

Engine: dot Format: svg Show raw output Download Share



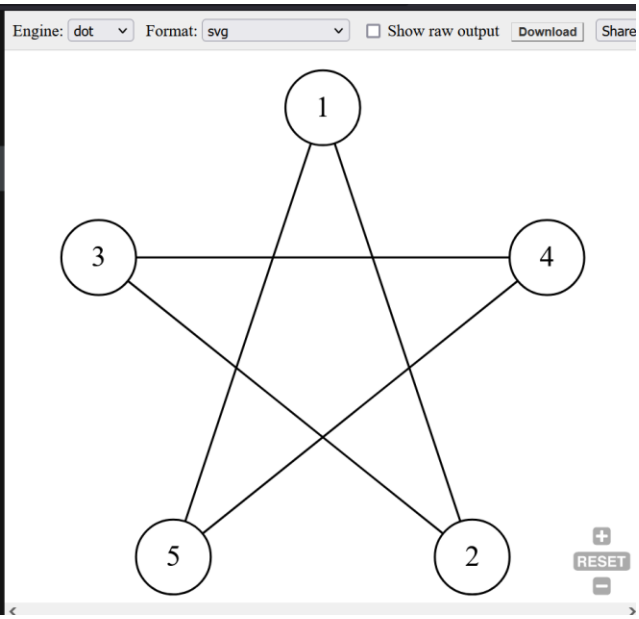
6.

```
digraph G {
    a [shape=circle, label=""]
    b [shape=circle, label=""]
    c [shape=circle, label=""]
    d [shape=circle, label=""]
    e [shape=circle, label=""]

    a -> b [arrowhead="none"]
    b -> c [arrowhead="none"]
    a -> c [arrowhead="none"]
    a -> d [arrowhead="none"]
    d -> e [arrowhead="none"]
    d -> c [arrowhead="none"]
    c -> e [arrowhead="none"]

    {rank = same a d }
    {rank = same b c e }


}
```



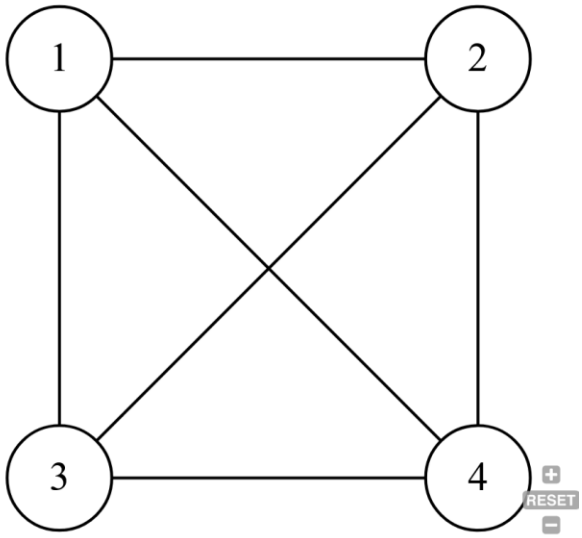
7.

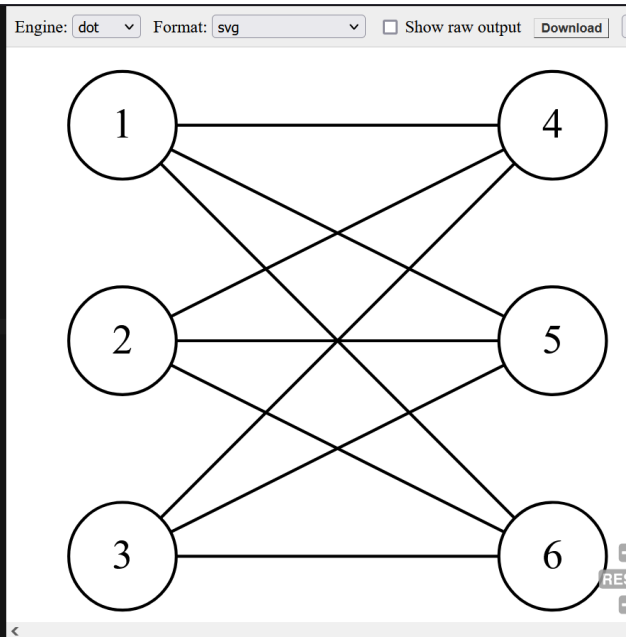
```
digraph G {

    graph [layout = neato, overlap = FALSE, outputorder = edgesfirst]
    a [shape=circle label="1" pos="0,1!"]
    b [shape=circle label="3" pos="-1.5, 0!"]
    c [shape=circle label="4" pos="1.5, 0!"]
    d [shape=circle label="5" pos="-1, -2!"]
    e [shape=circle label="2" pos="1, -2!"]
    //invisible [shape=none label =""]

    a -> d [arrowhead="none"]
    a -> e [arrowhead="none"]
    b -> e [arrowhead="none"]
    c -> d [arrowhead="none"]
    b -> c [arrowhead="none"]

   // d -> invisible
   // e -> invisible



}
```



8.

```
digraph G {

    graph [layout = neato, overlap = FALSE, outputorder = edgesfirst]
    a [shape=circle label="1" pos="-1,1!"]
    b [shape=circle label="2" pos="1, 1!"]
    c [shape=circle label="3" pos="-1, -1!"]
    d [shape=circle label="4" pos="1, -1!"]

    a -> b [arrowhead=none]
    a -> c [arrowhead=none]
    a -> d [arrowhead=none]
    b -> c [arrowhead=none]
    b -> d [arrowhead=none]
    c -> d [arrowhead=none]

}
```



9.

```
digraph G {

    graph [layout = neato, overlap = FALSE, outputorder = edgesfirst]
    a [shape=circle label="1" pos="-1,1!"]
    b [shape=circle label="2" pos="-1, 0!"]
    c [shape=circle label="3" pos="-1, -1!"]
    d [shape=circle label="4" pos="1, 1!"]
    e [shape=circle label="5" pos="1, 0!"]
    f [shape=circle label="6" pos="1, -1!"]

    a -> d [arrowhead=none]
    a -> e [arrowhead=none]
    a -> f [arrowhead=none]

    b -> d [arrowhead=none]
    b -> e [arrowhead=none]
    b -> f [arrowhead=none]

    c -> d [arrowhead=none]
    c -> e [arrowhead=none]
    c -> f [arrowhead=none]

}
```