```
from mininet.net import Mininet
from mininet.node import Controller
from mininet.cli import CLI
from mininet.log import setLogLevel, info
def emptyNet():
  net = Mininet( controller=Controller )
 info( '*** Adding controller\n' )
  net.addController( 'c0' )
 info( '*** Adding hosts\n')
  h1 = net.addHost( 'h1', ip='10.0.0.1' )
  h2 = net.addHost( 'h2', ip='10.0.0.2' )
  h3 = net.addHost( 'h3', ip='10.0.0.3' )
  h4 = net.addHost( 'h4', ip='10.0.0.4' )
 info( '*** Adding switch\n')
  s1 = net.addSwitch('s1')
  info( '*** Creating links\n' )
  net.addLink( h1, s1 )
  net.addLink( h2, s1)
```

