

## Mini Quiz 24

[github.com/6035/sp22](https://github.com/mit-csl/6035-sp22)

Name: \_\_\_\_\_

Kerberos username (omit @mit.edu): \_\_\_\_\_

Consider the following program:

```
read a
read b
a = a + b
read c
d = 5*c
c = c + d
a = a * 2
c = c - a
if c < 0
    print c
exit
```

Q: Without performing any optimizations, draw the inference graph edges for the program. Note that we are not forming webs. Each node represents a variable. Two nodes are linked if they are alive at the same time.

a

b

d

c

Q: What is the minimum number of registers required to allocate all variables?

Q: Now you can optimize the code. What is the minimum number of required to allocate all variables?