

Deadline: Jan 26

## Exercise

- Dining philosophers (from Part2)
- Set  $N=3$
- Put an infinite loop
- Turn *eatid* on and off
  - *id* is kept for each process
- Verify **G F eat0**
  - Appropriate fairness should be assumed
  - Verify **G F eat1** and **G F eat2**

```
public Philosopher(int id,
    Fork left, Fork right) {
    this.id = id;
    this.left = left;
    this.right = right;
    start(); // spin off new thread
}
```

```
public void run() {
    BAVerify.declareThreadAP("run"+id,"enabled"+id);
    while (true) {
        // think!
        synchronized (left) {
            synchronized (right) {
                // eat!
                BAVerify.apValueVar("eat"+id,true);
                BAVerify.apValueVar("eat"+id,false);
            }
        }
    }
}
```