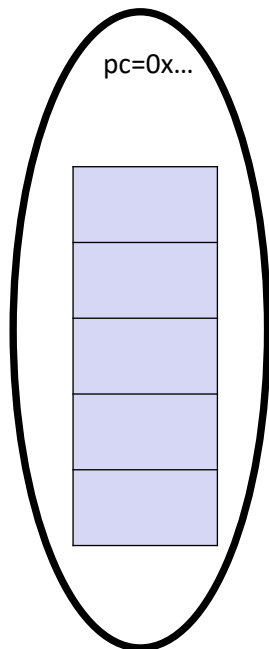
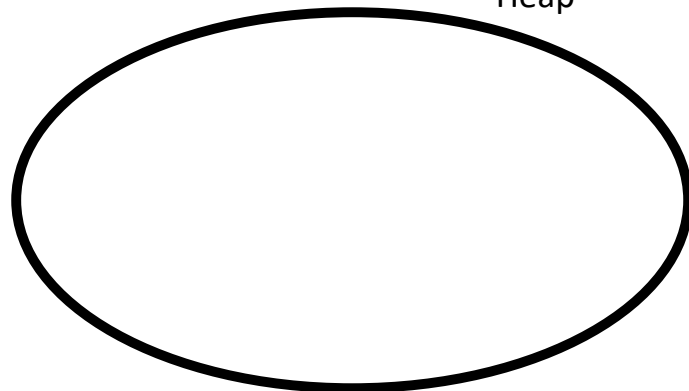


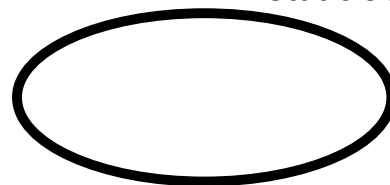
## Callstack and PC



## Heap



## Static objects



# Almost-Correct Pseudocode

```
class BankAccount {
    private int balance = 0;
    private Lock lk = new Lock();

    public void withdraw(int amount) {
        lk.acquire(); // may block
        int b = getBalance();
        if (amount > b)
            throw new WithdrawTooLargeException();
        setBalance(b - amount);
        lk.release();
    }

    // deposit() would also acquire/release lk
}
```

Note: 'Lock' is not an actual Java class