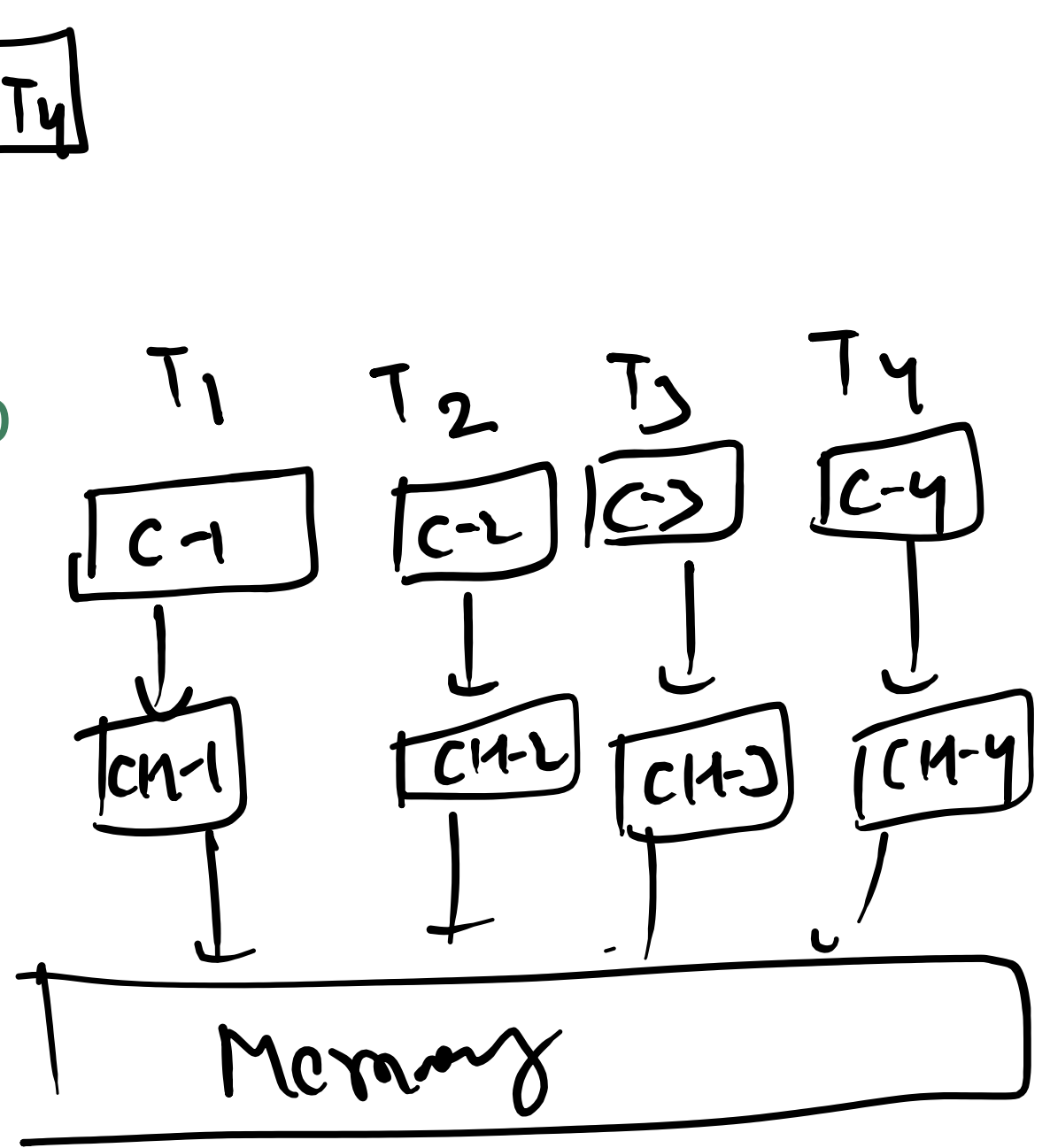


# Singleton pattern

```
// Lazy
private static Singleton s;
private Singleton() {
    // TODO Auto-generated constructor stub
}
public static Singleton getSingleton() {
    if (s == null) {
        s = new Singleton();
    }
    return s;
}
```

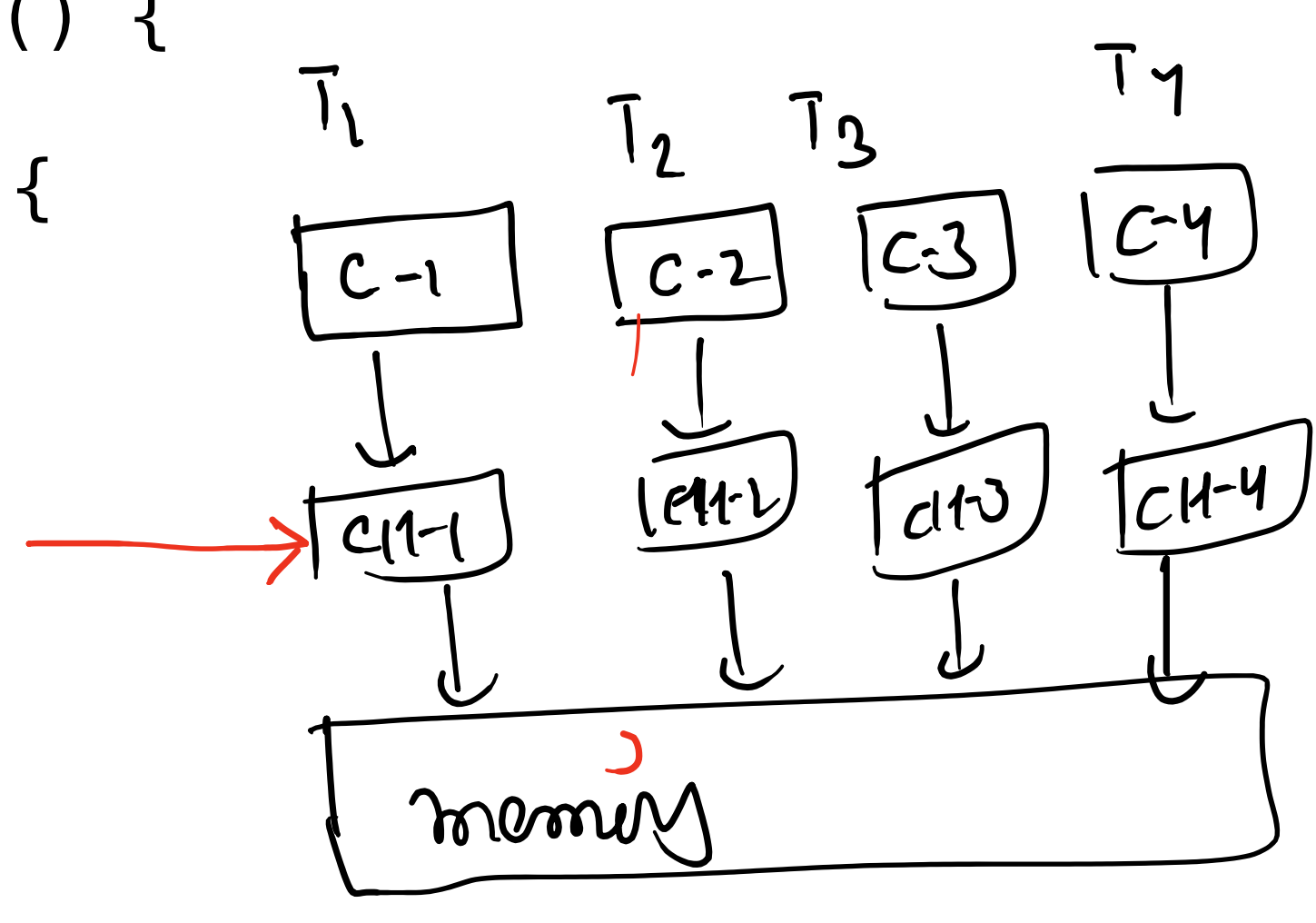


```
synchronized public static Singleton getSingleton() {
    if (s == null) {
        s = new Singleton();
    }
    return s;
}
```

```
synchronized public static Singleton getSingleton() {
    if (s == null) {
        synchronized (Singleton.class) {
            s = new Singleton();
        }
    }
    return s;
}
```

```
public static Singleton getSingleton() {
    if (s == null) {
        synchronized (Singleton.class) {
            if (s == null) {
                s = new Singleton();
            }
        }
    }
    return s;
}
```

```
// synchronized
private static Singleton s;
public static Singleton getSingleton() {
    if (s == null) {
        synchronized (Singleton.class) {
            if (s == null) {
                s = new Singleton();
            }
        }
    }
    return s;
}
```



class Student {  
 String name;  
 int age;  
}

PGVM  
Student s = new Student();  
s.name = "Kajvi";  
s.age = 14;

## How to Serialize (Save) and De-serialize(Restore) Objects?

