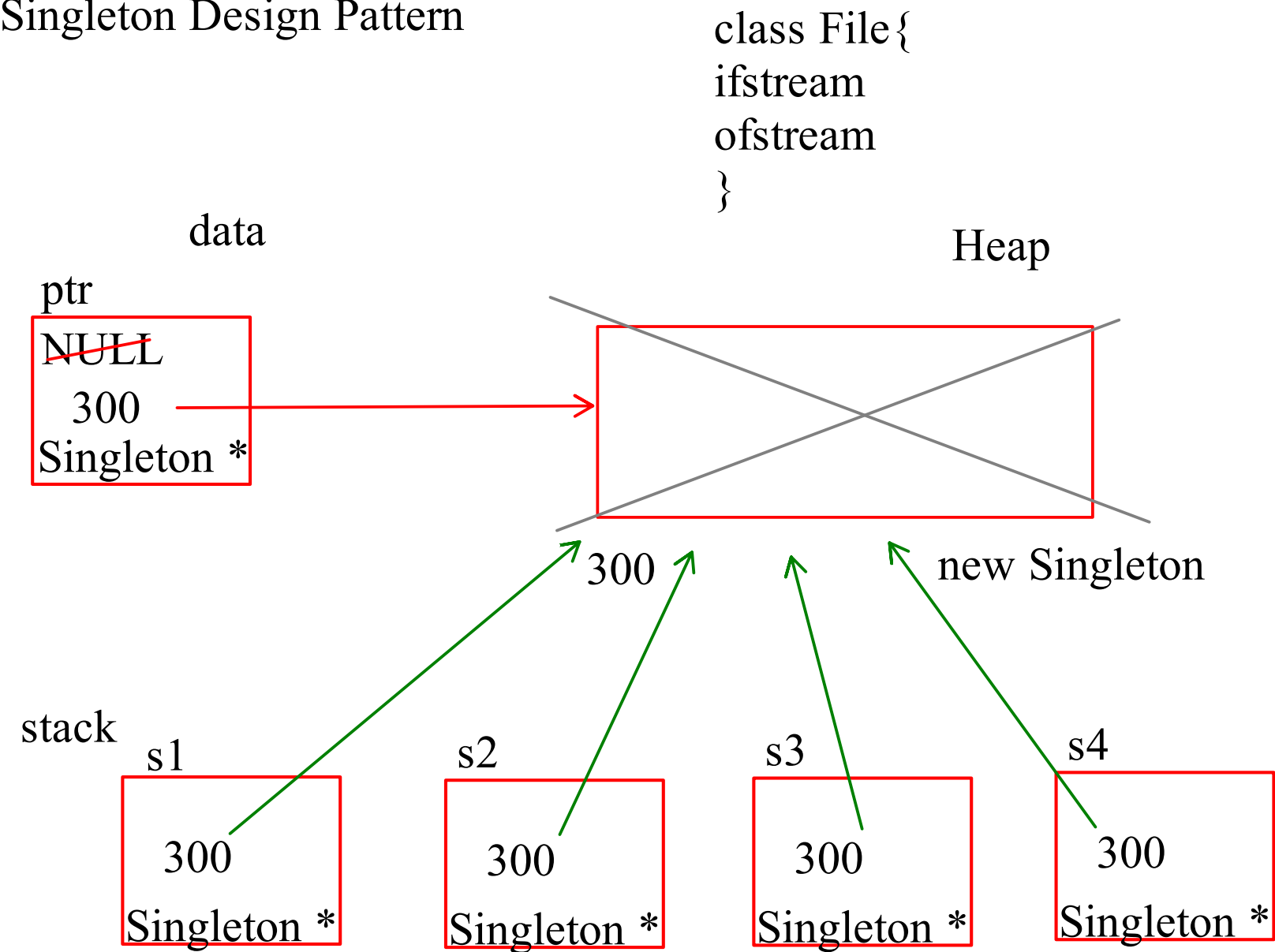


Singleton Design Pattern



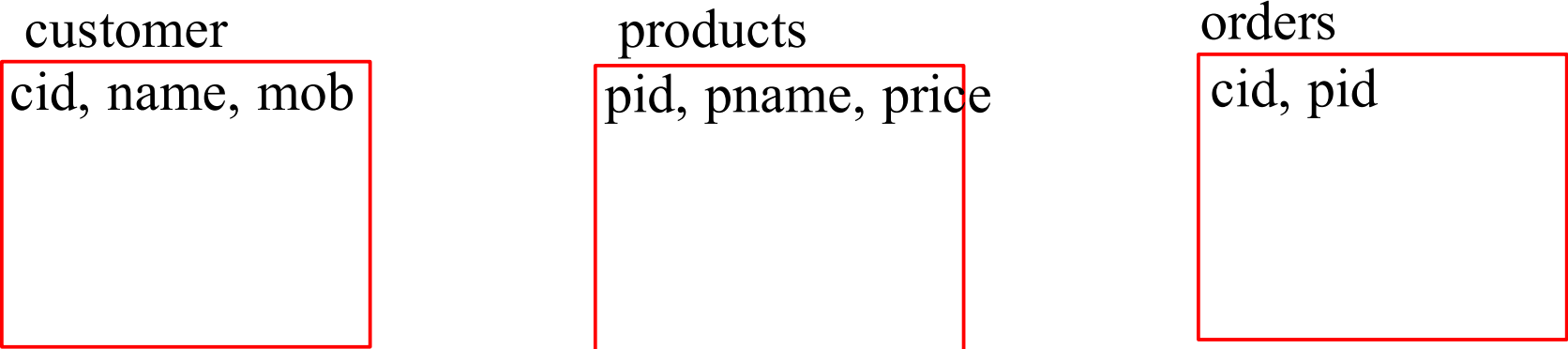
class File{
ifstream
ofstream
}
}

data

Heap

File IO

```
Customer{  
  cid,  
  name,  
  mobile,  
  vector<Product*> purchaseproduct;  
}
```



unique_ptr
shared_ptr
weak_ptr

