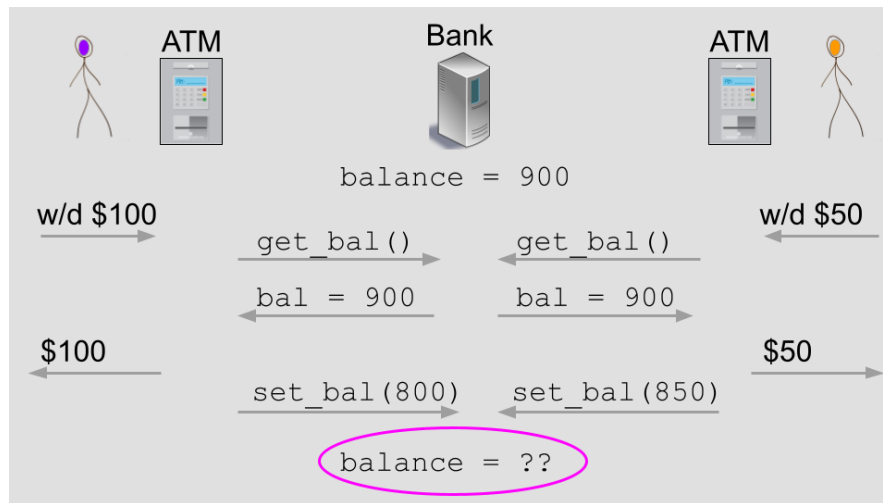


Question 1: Race Conditions Suggest a fix to this race condition vulnerability.



Question 2: Security Review with DAC Examine the discretionary access control (DAC) matrix shown below. Identify any potential confidentiality or integrity issues that could arise under this policy. For example, could sensitive data in topSecret.txt be indirectly disclosed to Bob through allowed operations (e.g., via the printer or unrestricted.txt)? Explain your reasoning and describe how you might modify the permissions to prevent such violations.

	topSecret.txt	printer	unrestricted.txt
Alice	RW	W	RW
Bob	—	W	R

Question 3: Access Control A model that allowed subjects to read and write at only their own security level would provide. . .

- ☐ Confidentiality only
- ☐ Integrity only
- ☐ Confidentiality and Integrity
- ☐ Confidentiality, Integrity, and Availability

Question 4: The Bell LaPadula model provides confidentiality by requiring. . .

- ☐ No read up, no write up
- ☐ No read up, no write down
- ☐ No read down, no write up
- ☐ No read down, no write down



Question 5: Biba Integrity Model 5.1. Under the Biba Integrity model, who is allowed to write to this document?

- ☐ Purple only
- ☐ Orange only
- ☐ Both Purple and Orange

5.2. Under the Biba Integrity model, who is allowed to read this document?

- ☐ Purple only
- ☐ Orange only
- ☐ Both Purple and Orange