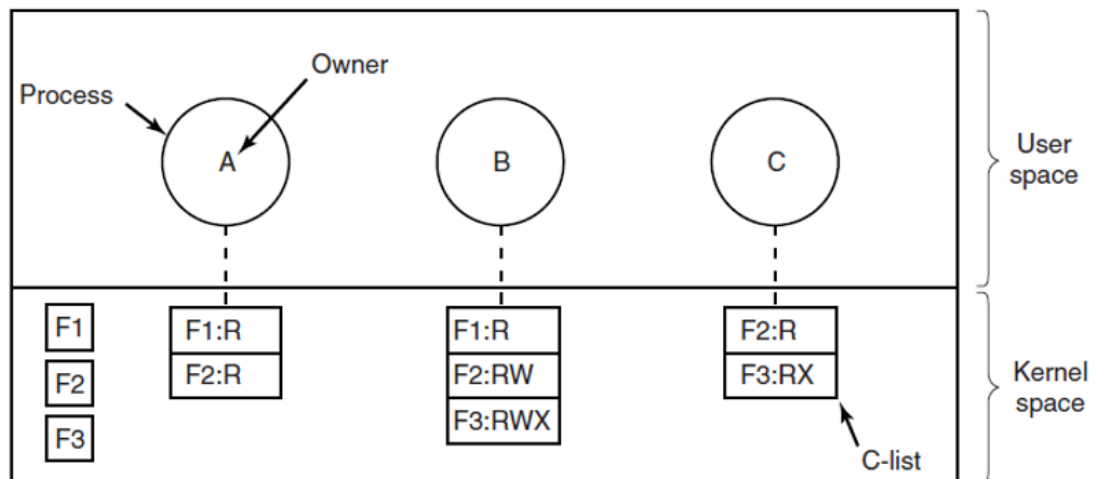


# W8D1

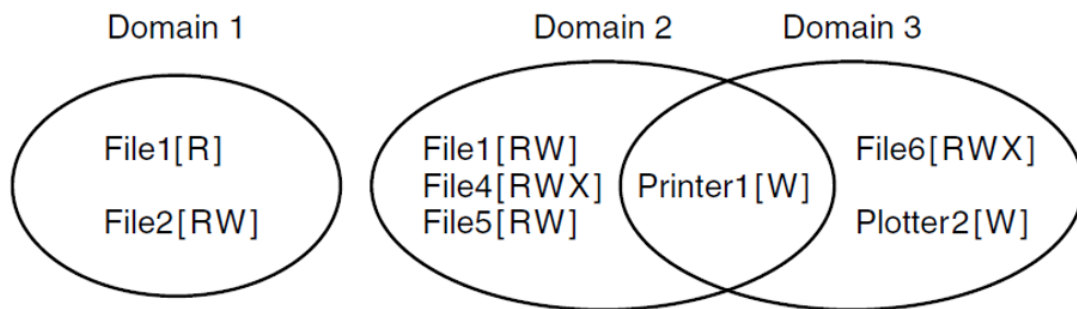
## The Security Environment Threats

Confidentiality, Integrity, Availability

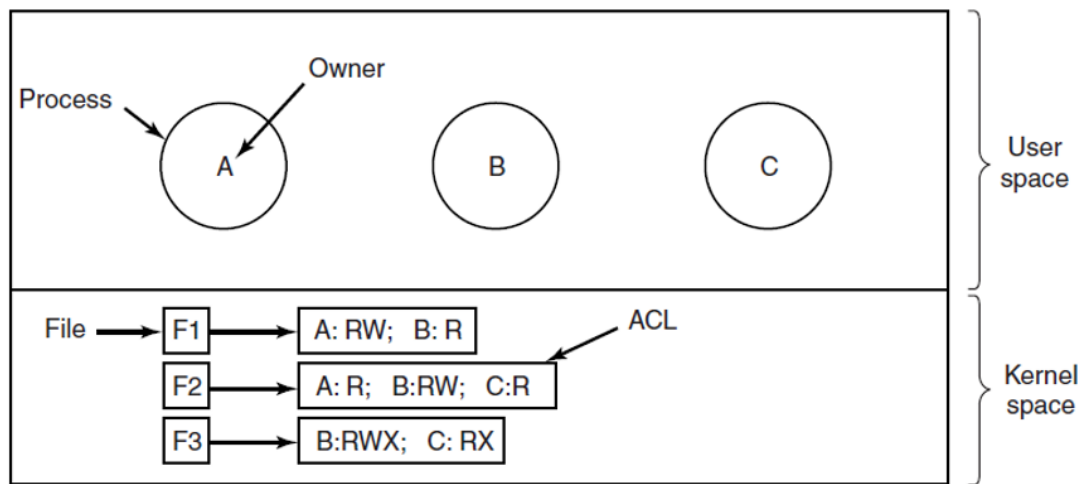
### Capabilities



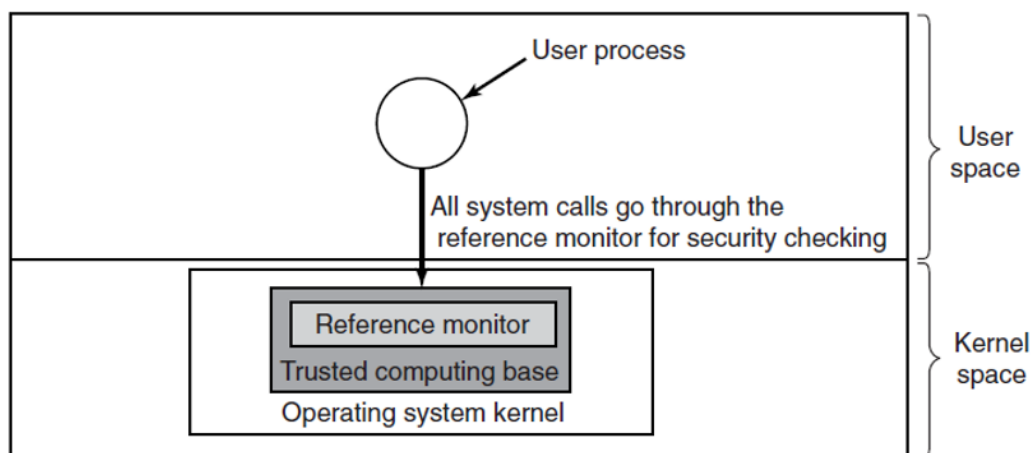
### Protection Domains



### Access Control Lists



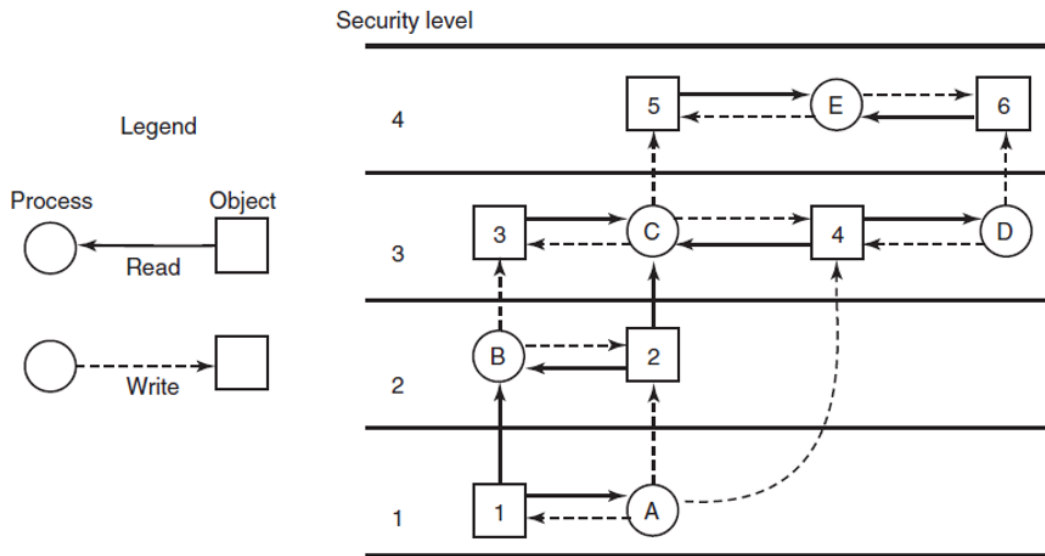
## Trusted Computing Base



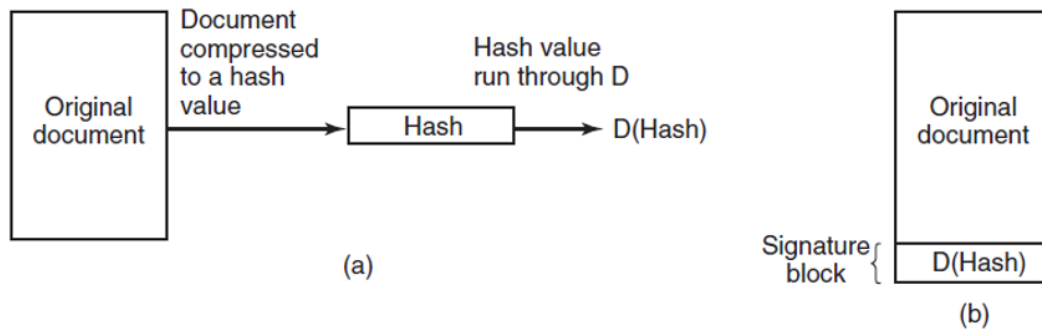
## Multilevel Security and Bell-LaPadula Model

Bell-LaPadula Model rules for information flow:

- The simple security property  
Process running at security level  $k$  can read only objects at its level or lower
- The  $*$  property  
Process running at security level  $k$  can write only objects at its level or higher



## Digital Signatures



## Authentication

Methods of authenticating users when they attempt to log in based on one of three general principles:

- Something the user knows.
- Something the user has.
- Something the user is.

## Buffer Overflow Attacks

