Homework 5

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Source	Stimulus	Artifact	Environment	Response	Response Measure
Heartbeat Monitor	Server unresponsive	Process	Normal Operation	Inform Operator Continue to Operate	No Downtime
Memory Monitor	Thread crash	Process	Normal Operation	Log the system status,Notify the crash system,kill the thread,recover the thread	No Downtime

exploit redundancy :

- Voting
    - Replication
    - Functional redundancy
    - Analytic redundancy
- Active redundancy
- Passive redundancy
- Spare
- Rollback
- State resynchronization

Not exploit redundancy :

- Ping/echo
- Monitor
- Heartbeat
- Time stamp
- Sanity checking
- Exception detection
    - System exceptions
    - The parameter fence

- - Parameter typing
  - TImeout
- Self-test
- Exception handling
- Software upgrade
- Removal from service
- Transactions
- Predictive model