- final exam -

- institue of Automation and information Tecnology
- Departement softour Engeineering
- Subjeet:- Design and APPlication Pattern
- Tiket Numeber: 20
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1- Describe the 5 solid design Principles?

solid is a set of five objeet-oriented design Principles that helps developers create softour that is easy to maintain extend and understand These Principles focus on good class design, not on specific algorithm or Patterns.

S- singleResponsibility prineiplele (SRP)
A class shoud have only one responsibility and one reason to change This mean each class shoud focus on doing one speeific task.
if class handles multiple reasponsiblites and one reason, change in one partmany affect others.

OCP (opcn/closed Principles)
softour component should be open for extension but closed for modification.
You should be able to add new functionality withhout changin existing code. This reduce the risk of introduction bugs when updating system.

-hsp (objeet) (Liskov subsituation Principle (LSP)
objeet of superclasses should be replaceable with objeet of its sub classes withhout breaking the Program.
this ensure that chaild class behave correctely when used insted of their parent class and maintain expected functionlity

-Isp (interface segregation Principle)
Client should not be found or forced to depend on interface they dont use insted of one large interface its better to use multiple smaller, speeifiC interface, so classes only implement what they need

DiP (Dependancy inversion Principle)
High level module) should not depend on low-level modules: both. should depend on abstration.
this Principle encourge depending on interface or abstruct class not concerete implemention, which makes system more flexible and easier to test.