Defnitions

Design patterns-the patterns are like blueprint to solve design problem in code,

They are concrete and solve a particular kind of problem in a software.

Three type:

Creational-used for creating objects and instantiating objects.

Structural-to manage the structure of classes and interfaces ans the relation between them.

Combining of objects and how they are related to each other.

Behavioural-communication between the object and responsibilities.

1. Singleton-it is a creational design pattern which will assure that a class is instatntiated only once and have an single point of access to it .
2. Proxy-it is a structural design pattern which acts as an placeholder or a surrogate to another object and provide control access to it.
3. Command pattern-it is a behavioural design pattern which turns a request into a standalone object and also has the information about the request.
4. Fascade pattern-it is structural design pattern , used to provide a simplified unified interface,so it is easier for the user to access and supports low coupling.
5. Adapter pattern-it is a structural design pattern which allows incompaticle interfaces to work together by wrapping them.
6. Factory – it is a creational design pattern used for creating objects without specifying the class of object .

We use interfaces for creating an object in superclass but let subclasses decide which class to instantiate.

1. Prototype -prototype is a creational design pattern that allows you to clone an object instead of creating something new again.
2. Momento-it is a behavioural design pattern which is used to capture and restore objects state,it is like an undo and redo.