A design pattern provides a general reusable solution for the common problems that occur in software design. The pattern typically shows relationships and interactions between classes or objects.

1)Creational design patterns

These design patterns are all about class instantiation or object creation.

These design patterns are used when a decision must be made at the time of instantiation of a class (i.e. creating an object of a class).

2)Structural design patterns

Structural design patterns are concerned with how classes and objects can be composed, to form larger structures.

The structural design patterns simplify the structure by identifying the relationships.

3)Behavioral Design Patterns

Behavioral design patterns are concerned with the interaction and communication of objects.

In these design patterns, the interaction between the objects should be in such a way that they can easily talk to each other and still should be loosely coupled.