1. Factory Pattern : This is the most common design pattern almost used very widely I all application. Example DB Connection manager the give you object of connection for further operation with DB.
2. What is Need of abstract class? Any real time example?

A concrete example of an abstract class would be a class called Animal. You see many animals in real life, but there are only kinds of animals. That is, you never look at something purple and furry and say "that is an animal and there is no more specific way of defining it". Instead, you see a dog or a cat or a pig,all animals. The point is, that you can never see an animal walking around that isn't more specifically something else (duck, pig, etc.). The Animal is the abstract class and Duck/Pig/Cat are all classes that derive from that base class. Animals might provide a function called "Age" that adds 1 year of life to the animals. It might also provide an abstract method called "IsDead" that, when called, will tell you if the animal has died. Since IsDead is abstract, each animal must implement it.So, a Cat might decide it is dead after it reaches 14 years of age, but a Duck might decide it dies after 5 years of age.

Source: Stackoverflow(http://stackoverflow.com/questions/1894453)