How does the Java Observer/Observable work?

The Observer pattern allows objects to monitor state changes in a subject object.

- **Given**
  - An unknown number of objects are dependent on the state of a subject object

- **Desired**
  - Maintain consistent object state as subject state changes
  - Provide isolation so that subject has no knowledge of specifics of dependent objects

- **Solution**
  - Observers register with subject object to be notified of changes in the subject