

King Fahd University of Petroleum and Minerals  
College of Computer Sciences and Engineering  
Department of Computer Engineering

COE 451 – Computer and Network Security (T142)

**Programming Assignment (due date & time: Thursday 09/04/2015 during class period)**

**Description:**

Using Java, implement both an **ECB** mode and a **CBC** mode of the **Tiny Encryption Algorithm (TEA)** with 32 rounds for encrypting each block. **Leave the first 10 blocks unencrypted.** Test your implementation of both the ECB and the CBC modes by using the [following linked image](#) to show a diagram analogous to that in Figure 3.3.

**Deliverables:**

1. Submit a hard copy of your diagrams.
2. Submit a **well-documented** soft copy of your implementation to [marwan@kfupm.edu.sa](mailto:marwan@kfupm.edu.sa) and [g201307310@kfupm.edu.sa](mailto:g201307310@kfupm.edu.sa) along with a **readme file** on how to execute your implementation.

**As usual, the implementation should be based on your own genuine effort 😊**