Typical Programming Sequence of CERTI
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**Receiver Side**

### Preparation

1. **Federation Management**
   - `RTIambassador.createFederationExecution`
   - `RTIambassador.joinFederationExecution`

2. **Declaration Management**
   - `RTIambassador.getObjectClassHandle`
   - `RTIambassador.getAttributeHandle`
   - `RTIambassador.subscribeObjectClassAttributes`

3. **Object Management**
   ```
   while (!myFedAmb.discovRT) {
     rtiAmb.tick();  /*......*/  } //tick loop
   ```
   - `NullFederateAmbassador.discoverObjectInstance`
     - function need override
     - function will be invoked during tick loop automatically by libRTI, no explicit invoking code needed for CERTI lib user

### Simulation/Receive Loop

```java
while ( true ) {  // Receive loop, receive once per iteration
    while (!myFedAmb.newRT) { rtiAmb.tick();} //tick loop, receiving
    /*......*/
}
```

- `NullFederateAmbassador.reflectAttributeValue`
  - function need override
  - function will be invoked during tick loop automatically by libRTI, no explicit invoking code needed for CERTI lib user

### Clean Up

1. **Declaration Management**
   - `RTIambassador.unsubscribeObjectClass`

2. **Federation Management**
   - `RTIambassador.resignFederationExecution`
   - `RTIambassador.destroyFederationExecution`
Sender Side

Preparation

1. Federation Management
   - RTIambassador.createFederationExecution
   - RTIambassador.joinFederationExecution
2. Declaration Management
   - RTIambassador.getObjectClassHandle
   - RTIambassador.getAttributeHandle
   - RTIambassador.publishObjectClass
3. Object Management
   - RTIambassador.registerObjectInstance

Simulation/Send Loop

```java
while (true) { //Send loop, send once per iteration
    /* calculate attribute values that are to be changed......*/
    rtiAmb.updateAttributeValues //sending
    /*......*/
}
```

- RTIambassador.updateAttributeValues

Clean Up

1. Declaration Management
   - RTIambassador.unpublishObjectClass
2. Federation Management
   - RTIambassador.resignFederationExecution
   - RTIambassador.destroyFederationExecution