```java
public class Graph {
  ...
  Edge add(Node n, Node m) {
    Edge e = new Edge(n, m);
    nodes.add(n); nodes.add(m); edges.add(e);
    if (Config.WEIGHTED) { e.weight = new Weight(); }
    return e;
  }
  Edge add(Node n, Node m, Weight w) {
    if (!Config.WEIGHTED) { throw new RuntimeException(); }
    Edge e = new Edge(n, m);
    nodes.add(n); nodes.add(m); edges.add(e);
    e.weight = w;
    return e;
  }
  ...
}
```

```java
public class Color {
  static void setDisplayColor(Color c) {...}
}
```

```java
public class Weight {
  void print() {...}
}
```

Code Replication

```java
     class Node {
       color;

    Node(){
      if (Config.COLORED) {
        color = new Color();
      }
    }
    void print() {
      if (Config.COLORED) {
        Color.setDisplayColor(color);
      }
      System.out.print(id);
    }
  }
}
```

```java
public class Edge {
  Weight weight;

  ...
  Edge(Node _a, Node _b) {
    a = _a; b = _b;
    if (Config.WEIGHTED) { weight = new Weight(); }
  }
  void print() {
    a.print(); b.print();
    if (Config.WEIGHTED) { weight.print(); }
  }
}
```