#### Amendment

### Java code:

### **Input and Output:**

All variables discussed blow are defined in Main.java

For vertex coloring, initialize variable PATH. PATH is the graph represented in .csv file. There is no need to initialize this variable for edge coloring.

For example, the graph is stored in networkC.csv:

```
private static final String PATH = "/home/user//networkC.csv";
```

For output, initialize OUTPUT\_NAME, It is the full path you want to store output. For example:

```
private static final String OUTPUT_NAME = "/home/user/networkC_out.csv";
```

To choose type of operation (edge coloring or vertex), set variable mode to MyType.vertex\_coloring or MyType.edge\_coloring.

For example, to vertex coloring:

```
private static final MyType mode = MyType.vertex_coloring;
```

If you are performing edge coloring, no need to input, just initialize variable V with degree of complete graph you want to operate.

For example, for edge color of a complete graph with degree equals 15, do:

```
private static int V = 16;
```

# Python code:

### **Input:**

All variables discussed blow are defined in runapp.py

For vertex coloring, set the path of input graph in variable input\_path1 For edge coloring, set the path of output graph generated by Java code in variable input\_path1

# Examples:

```
input_path1 = '/home/amirphl/networkC.csv'
input path1 = '/home/amirphl/k3.csv'
```

For vertex coloring, set the path of output graph generated by Java code in variable input path2

# Example:

```
input_path2 = '/home/amirphl/networkC_out.csv'
v_coloring = True # set to True for vertex coloring operation
e coloring = False # set to True for edge coloring operation
```