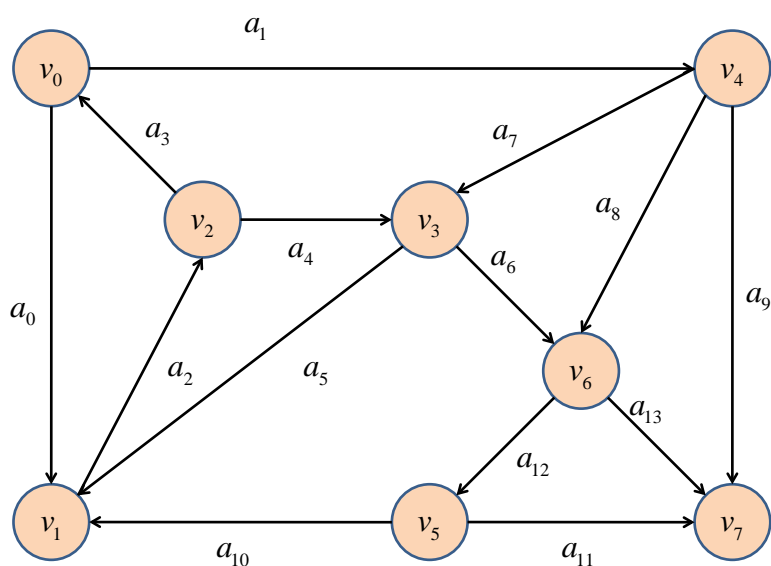


「グラフと組み合わせ」課題 5(解答例)

2012/5/21

1 グラフを作成する Java プログラム

次のグラフを表す Java クラス Graph1 を作成しなさい。



解答例

```
public class Graph1 extends Graph {
    public Graph1(String name) {
        super(name);
        int n = 8;
        //頂点の生成
        graphLib.Vertex vList[] = new graphLib.Vertex[n];
        for (int i = 0; i < n; i++) {
            vList[i] = new graphLib.Vertex(String.valueOf(i));
            addVertex(vList[i]);
        }
    }
}
```

```
}
```

```
//頂点の座標表示設定
```

```
double d = 80.;
```

```
vList[0].setPoint(d, d);
```

```
vList[1].setPoint(d, 4 * d);
```

```
vList[2].setPoint(2 * d, 2 * d);
```

```
vList[3].setPoint(3 * d, 2 * d);
```

```
vList[4].setPoint(5 * d, d);
```

```
vList[5].setPoint(3 * d, 4 * d);
```

```
vList[6].setPoint(4 * d, 3 * d);
```

```
vList[7].setPoint(5 * d, 4 * d);
```

```
//弧の定義
```

```
int k = 0;
```

```
addArc(vList[0], vList[1], String.valueOf(k));      k++;
```

```
addArc(vList[0], vList[4], String.valueOf(k));      k++;
```

```
addArc(vList[1], vList[2], String.valueOf(k));      k++;
```

```
addArc(vList[2], vList[3], String.valueOf(k));      k++;
```

```
addArc(vList[2], vList[0], String.valueOf(k));      k++;
```

```
addArc(vList[3], vList[1], String.valueOf(k));      k++;
```

```
addArc(vList[3], vList[6], String.valueOf(k));      k++;
```

```
addArc(vList[4], vList[3], String.valueOf(k));      k++;
```

```
addArc(vList[4], vList[6], String.valueOf(k));      k++;
```

```
addArc(vList[4], vList[7], String.valueOf(k));      k++;
```

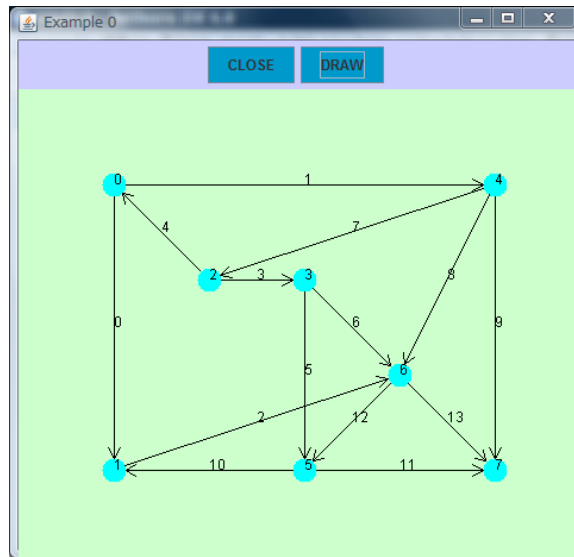
```
addArc(vList[5], vList[1], String.valueOf(k));      k++;
```

```
addArc(vList[5], vList[7], String.valueOf(k));      k++;
```

```
addArc(vList[6], vList[5], String.valueOf(k));      k++;
```

```
addArc(vList[6], vList[7], String.valueOf(k));
```

```
}
```



```
}
```