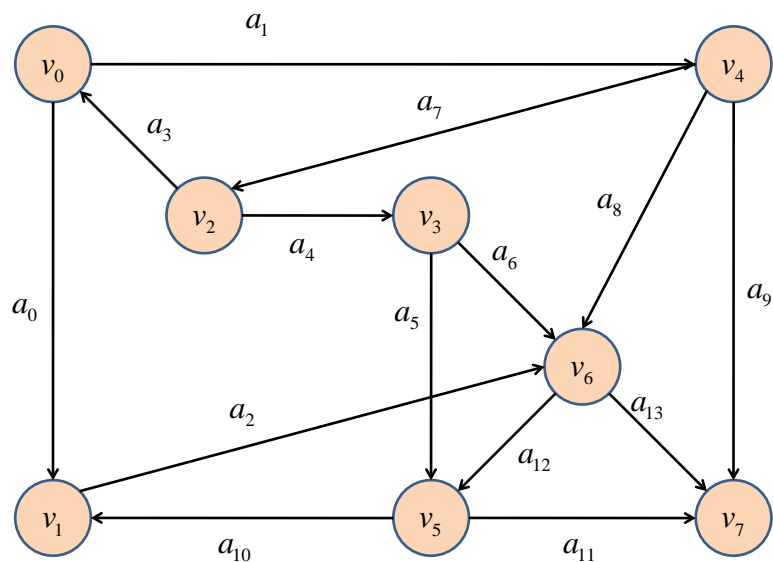


「グラフと組み合わせ」課題 5(解答例)

2010/5/24

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]);  
        }  
    }  
}
```

```

}
//頂点の表示座標を設定
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[6], 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[5], String.valueOf(k));      k++;
addArc(vList[3], vList[6], String.valueOf(k));      k++;
addArc(vList[4], vList[2], 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));

```

}

}

