

Graph API

```
public class Graph
```

```
    Graph(int V)
```

create an empty graph with V vertices

```
    Graph(In in)
```

create a graph from input stream

```
    void addEdge(int v, int w)
```

add an edge v - w

```
    Iterable<Integer> adj(int v)
```

vertices adjacent to v

```
    int V()
```

number of vertices

```
    int E()
```

number of edges

```
In in = new In(args[0]);
```

```
Graph G = new Graph(in);
```

← read graph from
input stream

```
for (int v = 0; v < G.V(); v++)
```

```
    for (int w : G.adj(v))
```

```
        StdOut.println(v + "-" + w);
```

← print out each
edge (twice)