Class Diagram:

|  |
| --- |
| UndirectedGraph |
| size: int |
| get\_size(): int  get\_verticies(): Vector<vertex>  get\_edges(): Vector<edge>  1  \* |

1

\*

|  |
| --- |
| Vertex |
| 2  1 |
| get\_edges: Vector<edge> |

|  |
| --- |
| Edge |
|  |
| get\_verticies(): Vector<vertex> |

|  |
| --- |
| HasEdgeWith |
| vertex1: vertex  vertex2: vertex |

Object Diagram:

|  |
| --- |
| : UndirectedGraph |
| size=4 |

|  |
| --- |
| v1 : Vertex |
|  |

|  |
| --- |
| : Edge |
|  |

|  |
| --- |
| HasEdgeWith |
| vertex1= v1  vertex2= v2 |

|  |
| --- |
| v2 : Vertex |
|  |

|  |
| --- |
| : Edge |
|  |

|  |
| --- |
| HasEdgeWith |
| vertex1= v2  vertex2= v3 |

|  |
| --- |
| : Edge |
|  |

|  |
| --- |
| HasEdgeWith |
| vertex1= v1  vertex2= v3 |

|  |
| --- |
| v3 : Vertex |
|  |

|  |
| --- |
| : Edge |
|  |

|  |
| --- |
| v4 : Vertex |
|  |

|  |
| --- |
| HasEdgeWith |
| vertex1= v3  vertex2= v4 |