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| **TAD Graph** | | |
| Graph G = (V, E) | | |
| {inv: |V| = n ∧ {{u, v} / u, v ∈ V {u, v} ∈ E }} | | |
| **Operaciones primitivas:** | | |
| Graph:  addVertex:  addEdge:  deleteVertex:  deleteEdge:  searchVertex:  searchEdge:  BFS:  DFS:  dijkstra:  floydWharshall:  prim:  kruskal: | Vertex v  Vertex v1 X Vertex v2  Vertex v  Edge e  Element e  Vertex v1 X Vertex v2  Vertex v1  -  Vertex v1 X Vertex v2  -  Vertex v1  - | 🡪 Graph  🡪 Graph  🡪 Graph  🡪 Graph  🡪 Graph  🡪 Vertex  🡪 Edge  🡪 Graph  🡪 Graph  🡪 Graph  🡪 Graph  🡪 Graph  🡪 Graph |
| **Especificación operaciones:** | | |
| **Graph()**  Builds an empty Graph  {pre: TRUE}  {post: } | | |
| **addVertex(Vertex v)**  adds a Vertex v in Graph  {pre: TRUE}  {post: Graph G} | | |
| **addEdge(Vertex v1, Vertex v2)**  adds a Edge e in Graph  {pre: Graph G }  {post: Graph G} | | |
| **deleteVertex(Vertex v)**  delete a Vertex v from Graph  {pre: Graph G }  {post: Graph G} | | |
| **deleteEdge(Edge e)**  delete a Edge e from Graph  {pre: Graph G }  {post: Graph G} | | |
| **searchVertex(Element e)**  search a Vertex v from Graph  {pre: Graph G }  {post: } | | |
| **searchEdge(Vertex v1, Vertex v2)**  search an Edge {v1, v2} from Graph  {pre: Graph G }  {post: } | | |