**TAD – Adjacency list**

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| **Graph TAD** | | | |
| Graph = { V = {v1, … , vn} , E = {(vk, vj) ∈ V x V}} | | | |
| { inv: (vk, vj) = (vj, vk), vk != vj } | | | |
| Primitive operations: | | | |
| * Graph |  | * Graph | Constructor |
| * addNode | Graph X Key X Data | * Graph | Modifier |
| * addEdge | Graph X Key X Key | * Graph | Modifier |
| * deleteNode | Graph X Key | * Graph | Modifier |
| * deleteEdge | Graph X Key X Key | * Graph | Modifier |
| * consult | Graph | * Text | Analyzer |
| * consultNode | Graph X Key | * Text | Analyzer |
| * consultEdge | Graph X Key X Key | * Text | Analyzer |
| * BFS | Graph X Key | * Text | Analyzer |
| * DFS | Graph X Key X Key X Integer | * Text | Analyzer |
| * dijkstra | Graph X Key | * Double[] | Analyzer |
| * floydWarshall | Graph | * Double[][] | Analyzer |
| * primMST | Graph X Key X Double | * Text | Analyzer |
| * kruskalMST | Graph | * Text | Analyzer |
| * size | Graph | * Integer | Analyzer |
| * hasEdge | Graph X Key X Key | * Boolean | Analyzer |
| * getNeighbors | Graph X Key | * List<Key> | Analyzer |
| * searchNode | Graph X Key | * Node | Analyzer |

**TAD – Adjacency matrix**

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| **Graph TAD** | | | |
| Graph = { An x n = , E = { e1, e2,  … en x n - n } | | | |
| { inv: E(i,j) = A[i][j] = 1, A[i][j]=A[j][i], A[i][i] = 0 } | | | |
| Primitive operations: | | | |
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| * addNode | Graph X Key X Data | * Graph | Modifier |
| * addEdge | Graph X Key X Key | * Graph | Modifier |
| * deleteNode | Graph X Key | * Graph | Modifier |
| * deleteEdge | Graph X Key X Key | * Graph | Modifier |
| * consult | Graph | * Text | Analyzer |
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| * BFS | Graph X Key | * Text | Analyzer |
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| * dijkstra | Graph X Key | * Double[] | Analyzer |
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| * kruskalMST | Graph | * Text | Analyzer |
| * size | Graph | * Integer | Analyzer |
| * hasEdge | Graph X Key X Key | * Boolean | Analyzer |
| * getNeighbors | Graph X Key | * List<Key> | Analyzer |
| * searchNode | Graph X Key | * Node | Analyzer |