Matthew Monaco and Nicholas Primamore

HW4 Time Complexity

* **Constructor**:
  + **List**: The maximum time complexity is Θ(n).
  + **Matrix**: The time complexity for the matrix is Θ(n2).
* **Destructor**:
  + **List**: The maximum time complexity is O(n2). The minimum is Ω(n)
  + **Matrix**: The time complexity for the matrix is Θ(1).
* **cloneGraph**:
  + **List**: If the initial graph is already a list, then the time complexity is O(n2). If the initial graph is a matrix, then the time complexity is Θ(n2). The minimum time for cloneGraph to list is Ω(1).
  + **Matrix**: If the initial graph is already a matrix, then the time complexity is Θ(n2). If the initial graph is a list, then the time complexity is O(n2). The minimum time for cloneGraph to matrix is Ω(1).
* **numVerts**: Θ(1).
* **addEdge**:
  + **List**: The maximum time complexity is O(n). The minimum is Ω(1).
  + **Matrix**: The time complexity for the matrix is Θ(1).
* **delEdge**:
  + **List**: The maximum time complexity is O(n). The minimum is Ω(1).
  + **Matrix**: The time complexity for the matrix is Θ(1).
* **edge**:
  + **List**: The maximum time complexity is O(n). The minimum is Ω(1).
  + **Matrix**: The time complexity for the matrix is Θ(1).
* **successors**:
  + **List**: The maximum time complexity is O(n). The minimum is Ω(1).
  + **Matrix**: The time complexity for the matrix is Θ(n).
* **Predecessors**:
  + **List**: The maximum time complexity is O(n2). The minimum is Ω(n)
  + **Matrix**: The time complexity for the matrix is Θ(n).