|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Operation | Linked List | Binary Heap | Binary Heap \* | Binomial Heap | Binomial Heap \* | Fibonacci Heap \* |
| MakeHeap |  |  |  |  |  |  |
| IsEmpty |  |  |  |  |  |  |
| Insert |  |  |  |  |  |  |
| ExtractMin |  |  |  |  |  |  |
| DecreaseKey |  |  |  |  |  |  |
| Delete |  |  |  |  |  |  |
| Union |  |  |  |  |  |  |
| FindMin |  |  |  |  |  |  |

\* amortized cost

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Operation | Linked List | Binary Heap | Binary Heap \* | Binomial Heap | Binomial Heap \* | Fibonacci Heap \* |
| Insert |  |  |  |  |  |  |
| ExtractMin |  |  |  |  |  |  |
| DecreaseKey |  |  |  |  |  |  |
| Union |  |  |  |  |  |  |

\* amortized cost

|  |  |  |
| --- | --- | --- |
| Operation | Linked List | Binary Heap |
| Insert |  |  |
| ExtractMin |  |  |
| DecreaseKey |  |  |
| Union |  |  |

\* amortized cost

|  |  |  |  |
| --- | --- | --- | --- |
| Operation | Linked List | Binary Heap | Binomial Heap |
| Insert |  |  |  |
| ExtractMin |  |  |  |
| DecreaseKey |  |  |  |
| Union |  |  |  |

\* amortized cost

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Operation | Linked List | Binary Heap | Binomial Heap | Binomial Heap \* |
| Insert |  |  |  |  |
| ExtractMin |  |  |  |  |
| DecreaseKey |  |  |  |  |
| Union |  |  |  |  |

\* amortized cost

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Operation | Linked List | Binary Heap | Binomial Heap | Binomial Heap \* | Fibonacci Heap \* |
| Insert |  |  |  |  |  |
| ExtractMin |  |  |  |  |  |
| DecreaseKey |  |  |  |  |  |
| Union |  |  |  |  |  |

\* amortized cost