A close up of text on a white background

Description automatically generated

A close up of a map

Description automatically generated

A close up of text on a white background

Description automatically generated

A close up of a logo

Description automatically generated

|  |  |  |
| --- | --- | --- |
| Node | Shortest Distance from S | Previous Node |
| S | 0 |  |
| A | 1,7 | S,D |
| B | 3 | A |
| C | 5,5,7 | B,E,F |
| D | 4,8 | S,G |
| E | 3,7,11,14 | A,D,G,H |
| F | 6,7 | E,I |
| G | 6 | S |
| H | 12 | G |
| I | 6,18 | E,H |
| t | 9,9,10 | C,F,I |

There are 3 shortest paths from S to t.

S-A-B-C-t

S-A-E-C-t

S-A-E-F-t

A screenshot of a cell phone

Description automatically generated

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13 | 94 | 39 | 16 | 44 | 88 | 11 | 5 | 12 | 23 | 20 |

Linear probing

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 44 | 12 | 13 | 5 | 88 | 23 | 94 | 39 | 11 | 16 | 20 |

Quadratic probing

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 44 | 12 | 13 | 88 | 16 | 11 | 23 | 5 | 20 | 39 | 94 |

Double Hashing