Team # 7 Weekly Report No. 5

Project Title: Gun Violence in America

**Presentation Outline**

|  |  |  |
| --- | --- | --- |
| **Activity** | Duration – 15 minutes | **Team Member** |
| Prepare for the presentation | 1min. | All |
| Introduce the team members | 1min | Charu |
| A brief description of the application | 1min | Amrita |
| Data Structure Diagram(s) | 2min. | Rasna |
| BST sorting algorithm | 2min. | Amrita |
| Structure Chart | 1min. | Rasna |
| Hashing algorithm | 1min. | Charu |
| Run the program (using the Demonstration Test Plan) | 4min. | Amrita |
| Questions/Answers | 2min. | All |

**Sample test run output**

Choose one of the following:

A: Add data

D: Delete data

F: Find data

L: List data

W: Write data

S: Statistics

H: Help

E: Exit

Enter your choice: L

Choose one of the following:

U - Unsorted List in Hash Table Sequence

P - Sorted List by ID

S - Sorted List by State

Q - ID indented tree

T - State indented tree

H - Help

E - Exit

Enter your choice: U

Index: 0; Collisions: 0; 1111->

Index: 1; Collisions: 0; Empty

Index: 2; Collisions: 0; Empty

Index: 3; Collisions: 0; Empty

Index: 4; Collisions: 0; Empty

Index: 5; Collisions: 0; 2698->

Index: 6; Collisions: 0; 4183->

Index: 7; Collisions: 1; 1650-> 2931->

Index: 8; Collisions: 0; 3121->

Index: 9; Collisions: 1; 2793-> 4333->

Index: 10; Collisions: 0; Empty

Index: 11; Collisions: 0; Empty

Index: 12; Collisions: 0; 1802->

Index: 13; Collisions: 0; 2349->

Index: 14; Collisions: 1; 1230-> 4268->

Index: 15; Collisions: 0; 3212->

Index: 16; Collisions: 0; Empty

Index: 17; Collisions: 0; 3592->

Index: 18; Collisions: 0; Empty

Index: 19; Collisions: 0; 2894->

Index: 20; Collisions: 0; Empty

Index: 21; Collisions: 0; Empty

Index: 22; Collisions: 0; Empty

Index: 23; Collisions: 0; 4508->

Index: 24; Collisions: 0; Empty

Index: 25; Collisions: 0; 4517->

Index: 26; Collisions: 1; 3321-> 3678->

Index: 27; Collisions: 0; Empty

Index: 28; Collisions: 1; 1923-> 4023->

Index: 29; Collisions: 0; 3912->

Index: 30; Collisions: 0; 4459->

Index: 31; Collisions: 0; Empty

Index: 32; Collisions: 0; Empty

Index: 33; Collisions: 0; Empty

Index: 34; Collisions: 0; Empty

Index: 35; Collisions: 0; 3421->

Index: 36; Collisions: 0; 2498->

Index: 37; Collisions: 0; 3857->

Index: 38; Collisions: 1; 2591-> 3795->

Index: 39; Collisions: 0; 3789->

Index: 40; Collisions: 0; Empty

Index: 41; Collisions: 0; Empty

Index: 42; Collisions: 0; 2231->

Index: 43; Collisions: 0; 1392->

Index: 44; Collisions: 0; 4592->

Index: 45; Collisions: 0; Empty

Index: 46; Collisions: 0; 1542->

Index: 47; Collisions: 0; Empty

Index: 48; Collisions: 0; 1467->

Enter your choice: Q

1. 3121 TX 11/5/2017 26 White M

2. 3912 NM 4/9/2016 0 White M

3. 4333 GA 3/12/2016 2 Unknown M

4. 4508 KS 3/7/2016 5 Other M

5. 4517 MA 3/6/2016 1 Other M

6. 4592 GA 3/6/2016 0 Black M

5. 4459 KS 3/7/2016 4 Other M

4. 4183 MI 3/11/2016 2 Unknown U

5. 4268 PA 3/9/2016 5 Unknown M

5. 4023 PA 3/9/2016 6 Unknown M

3. 3592 NM 4/1/2016 3 Asian M

4. 3789 AL 3/25/2016 2 White M

5. 3795 KY 3/20/2016 4 White M

6. 3857 AL 3/19/2016 2 Black M

5. 3678 TX 3/21/2016 4 Unknown M

4. 3321 VA 3/31/2016 2 Black M

5. 3421 TN 3/25/2016 2 Unknown M

5. 3212 NC 3/26/2016 3 Black M

2. 1923 CO 11/1/2017 3 White M

3. 2591 FL 1/6/2017 5 Latino M

4. 2793 FL 6/12/2016 49 Other M

5. 2894 TX 4/19/2016 4 White M

6. 2931 AL 4/19/2016 1 White M

5. 2698 VA 4/24/2016 0 Black M

4. 2349 WA 9/23/2016 5 Unknown M

5. 2498 TX 7/7/2016 5 Black M

5. 2231 LA 7/17/2016 3 Black M

3. 1467 MD 10/18/2017 3 Black M

4. 1650 FL 6/5/2017 5 Unknown M

5. 1802 CA 4/18/2017 3 Black M

5. 1542 OH 5/12/2017 3 White M

4. 1230 NV 10/1/2017 59 White M

5. 1392 PA 6/7/2017 3 White M

5. 1111 CA 6/14/2017 3 Asian M

Enter your choice: T

1. 3121 TX 11/5/2017 26 White M

2. 2349 WA 9/23/2016 5 Unknown M

3. 2498 TX 7/7/2016 5 Black M

4. 2698 VA 4/24/2016 0 Black M

5. 3321 VA 3/31/2016 2 Black M

5. 2894 TX 4/19/2016 4 White M

6. 3678 TX 3/21/2016 4 Unknown M

2. 1923 CO 11/1/2017 3 White M

3. 1467 MD 10/18/2017 3 Black M

4. 1230 NV 10/1/2017 59 White M

5. 1392 PA 6/7/2017 3 White M

6. 3421 TN 3/25/2016 2 Unknown M

7. 4023 PA 3/9/2016 6 Unknown M

8. 4268 PA 3/9/2016 5 Unknown M

6. 1542 OH 5/12/2017 3 White M

5. 3912 NM 4/9/2016 0 White M

6. 3592 NM 4/1/2016 3 Asian M

6. 3212 NC 3/26/2016 3 Black M

7. 4183 MI 3/11/2016 2 Unknown U

4. 1650 FL 6/5/2017 5 Unknown M

5. 2591 FL 1/6/2017 5 Latino M

6. 2231 LA 7/17/2016 3 Black M

7. 4517 MA 3/6/2016 1 Other M

7. 2793 FL 6/12/2016 49 Other M

8. 3795 KY 3/20/2016 4 White M

9. 4333 GA 3/12/2016 2 Unknown M

10. 4508 KS 3/7/2016 5 Other M

11. 4459 KS 3/7/2016 4 Other M

11. 4592 GA 3/6/2016 0 Black M

3. 1111 CA 6/14/2017 3 Asian M

4. 1802 CA 4/18/2017 3 Black M

4. 2931 AL 4/19/2016 1 White M

5. 3789 AL 3/25/2016 2 White M

6. 3857 AL 3/19/2016 2 Black M

Enter your choice: H

-- List Options --

U - Unsorted List in Hash Table Sequence

P - Sorted List by ID

S - Sorted List by State

Q - ID indented tree

T - State indented tree

H - Help

E - Exit

Enter your choice: E

Enter your choice: S

Load Factor : 57%

Total nodes : 34

Total collisions : 6

Enter your choice: F

Choose one of the following:

P - Search by ID

S - Search by State

E - Exit

Enter your choice: P

Enter ID to search: absc

Not found

Enter your choice: P

Enter ID to search: 2793

==================================================================

ID State Date Fatalities Race Gender

==================================================================

2793 FL 6/12/2016 49 Other M

Enter your choice: S

Enter State initials to search: PA

==================================================================

ID State Date Fatalities Race Gender

==================================================================

1392 PA 6/7/2017 3 White M

4023 PA 3/9/2016 6 Unknown M

4268 PA 3/9/2016 5 Unknown M

Enter your choice: E

Enter your choice: H

-- Displaying menu --

A: Add data

D: Delete data

F: Find data

L: List data

W: Write data

S: Statistics

H: Help

E: Exit

Enter your choice: A

Enter 4-digit ID:

Enter 4-digit ID: abcdef

Enter 4-digit ID: 5333

Enter state initials: x1

Enter state initials: xcx

Enter state initials: xx

Enter date (MM/DD/YYYY): //

Enter date (MM/DD/YYYY): 0/1/00

Enter date (MM/DD/YYYY): 10/ab/1000

Enter date (MM/DD/YYYY): 1/1/1000

Enter number of fatalities:

Enter number of fatalities: a0

Enter number of fatalities: 0

Enter race: 0

Enter race: other

Enter gender: L

Enter gender: U

==================================================================

ID State Date Fatalities Race Gender

==================================================================

5333 XX 1/1/1000 0 other U

Insertion successful

Enter your choice: S

Load Factor : 57%

Total nodes : 35

Total collisions : 7

Enter your choice: H

-- Displaying menu --

A: Add data

D: Delete data

F: Find data

L: List data

W: Write data

S: Statistics

H: Help

E: Exit

Enter your choice: A

Enter 4-digit ID:

Enter 4-digit ID: abcdef

Enter 4-digit ID: 5333

Enter state initials: x1

Enter state initials: xcx

Enter state initials: xx

Enter date (MM/DD/YYYY): //

Enter date (MM/DD/YYYY): 0/1/00

Enter date (MM/DD/YYYY): 10/ab/1000

Enter date (MM/DD/YYYY): 1/1/1000

Enter number of fatalities:

Enter number of fatalities: a0

Enter number of fatalities: 0

Enter race: 0

Enter race: other

Enter gender: L

Enter gender: U

==================================================================

ID State Date Fatalities Race Gender

==================================================================

5333 XX 1/1/1000 0 other U

Insertion successful

Enter your choice: S

Load Factor : 57%

Total nodes : 35

Total collisions : 7

Enter your choice: L

Choose one of the following:

U - Unsorted List in Hash Table Sequence

P - Sorted List by ID

S - Sorted List by State

Q - ID indented tree

T - State indented tree

H - Help

E - Exit

Enter your choice: U

Index: 0; Collisions: 0; 1111->

Index: 1; Collisions: 0; Empty

Index: 2; Collisions: 0; Empty

Index: 3; Collisions: 0; Empty

Index: 4; Collisions: 0; Empty

Index: 5; Collisions: 0; 2698->

Index: 6; Collisions: 0; 4183->

Index: 7; Collisions: 1; 1650-> 2931->

Index: 8; Collisions: 0; 3121->

Index: 9; Collisions: 1; 2793-> 4333->

Index: 10; Collisions: 0; Empty

Index: 11; Collisions: 0; Empty

Index: 12; Collisions: 0; 1802->

Index: 13; Collisions: 0; 2349->

Index: 14; Collisions: 1; 1230-> 4268->

Index: 15; Collisions: 0; 3212->

Index: 16; Collisions: 0; Empty

Index: 17; Collisions: 0; 3592->

Index: 18; Collisions: 0; Empty

Index: 19; Collisions: 0; 2894->

Index: 20; Collisions: 0; Empty

Index: 21; Collisions: 0; Empty

Index: 22; Collisions: 0; Empty

Index: 23; Collisions: 0; 4508->

Index: 24; Collisions: 0; Empty

Index: 25; Collisions: 0; 4517->

Index: 26; Collisions: 1; 3321-> 3678->

Index: 27; Collisions: 0; Empty

Index: 28; Collisions: 1; 1923-> 4023->

Index: 29; Collisions: 0; 3912->

Index: 30; Collisions: 0; 4459->

Index: 31; Collisions: 0; Empty

Index: 32; Collisions: 0; Empty

Index: 33; Collisions: 0; Empty

Index: 34; Collisions: 0; Empty

Index: 35; Collisions: 0; 3421->

Index: 36; Collisions: 1; 2498-> 5333->

Index: 37; Collisions: 0; 3857->

Index: 38; Collisions: 1; 2591-> 3795->

Index: 39; Collisions: 0; 3789->

Index: 40; Collisions: 0; Empty

Index: 41; Collisions: 0; Empty

Index: 42; Collisions: 0; 2231->

Index: 43; Collisions: 0; 1392->

Index: 44; Collisions: 0; 4592->

Index: 45; Collisions: 0; Empty

Index: 46; Collisions: 0; 1542->

Index: 47; Collisions: 0; Empty

Index: 48; Collisions: 0; 1467->

Enter your choice: E

Enter your choice: D

Enter ID of incident to delete: 5000

Not found!

Enter your choice: D

Enter ID of incident to delete: 3121

==================================================================

ID State Date Fatalities Race Gender

==================================================================

3121 TX 11/5/2017 26 White M

Deleted from BST 1

Deleted from BST 2

Deleted from HT

Enter your choice: D

Enter ID of incident to delete: 4333

==================================================================

ID State Date Fatalities Race Gender

==================================================================

4333 GA 3/12/2016 2 Unknown M

Deleted from BST 1

Deleted from BST 2

Deleted from HT

Enter your choice: L

Choose one of the following:

U - Unsorted List in Hash Table Sequence

P - Sorted List by ID

S - Sorted List by State

Q - ID indented tree

T - State indented tree

H - Help

E - Exit

Enter your choice: P

==================================================================

ID State Date Fatalities Race Gender

==================================================================

1111 CA 6/14/2017 3 Asian M

1230 NV 10/1/2017 59 White M

1392 PA 6/7/2017 3 White M

1467 MD 10/18/2017 3 Black M

1542 OH 5/12/2017 3 White M

1650 FL 6/5/2017 5 Unknown M

1802 CA 4/18/2017 3 Black M

1923 CO 11/1/2017 3 White M

2231 LA 7/17/2016 3 Black M

2349 WA 9/23/2016 5 Unknown M

2498 TX 7/7/2016 5 Black M

2591 FL 1/6/2017 5 Latino M

2698 VA 4/24/2016 0 Black M

2793 FL 6/12/2016 49 Other M

2894 TX 4/19/2016 4 White M

2931 AL 4/19/2016 1 White M

3212 NC 3/26/2016 3 Black M

3321 VA 3/31/2016 2 Black M

3421 TN 3/25/2016 2 Unknown M

3592 NM 4/1/2016 3 Asian M

3678 TX 3/21/2016 4 Unknown M

3789 AL 3/25/2016 2 White M

3795 KY 3/20/2016 4 White M

3857 AL 3/19/2016 2 Black M

3912 NM 4/9/2016 0 White M

4023 PA 3/9/2016 6 Unknown M

4183 MI 3/11/2016 2 Unknown U

4268 PA 3/9/2016 5 Unknown M

4459 KS 3/7/2016 4 Other M

4508 KS 3/7/2016 5 Other M

4517 MA 3/6/2016 1 Other M

4592 GA 3/6/2016 0 Black M

5333 XX 1/1/1000 0 other U

Enter your choice: S

==================================================================

ID State Date Fatalities Race Gender

==================================================================

2931 AL 4/19/2016 1 White M

3789 AL 3/25/2016 2 White M

3857 AL 3/19/2016 2 Black M

1111 CA 6/14/2017 3 Asian M

1802 CA 4/18/2017 3 Black M

1923 CO 11/1/2017 3 White M

1650 FL 6/5/2017 5 Unknown M

2591 FL 1/6/2017 5 Latino M

2793 FL 6/12/2016 49 Other M

4592 GA 3/6/2016 0 Black M

4508 KS 3/7/2016 5 Other M

4459 KS 3/7/2016 4 Other M

3795 KY 3/20/2016 4 White M

2231 LA 7/17/2016 3 Black M

4517 MA 3/6/2016 1 Other M

1467 MD 10/18/2017 3 Black M

4183 MI 3/11/2016 2 Unknown U

3212 NC 3/26/2016 3 Black M

3912 NM 4/9/2016 0 White M

3592 NM 4/1/2016 3 Asian M

1230 NV 10/1/2017 59 White M

1542 OH 5/12/2017 3 White M

1392 PA 6/7/2017 3 White M

4023 PA 3/9/2016 6 Unknown M

4268 PA 3/9/2016 5 Unknown M

3421 TN 3/25/2016 2 Unknown M

2498 TX 7/7/2016 5 Black M

2894 TX 4/19/2016 4 White M

3678 TX 3/21/2016 4 Unknown M

2698 VA 4/24/2016 0 Black M

3321 VA 3/31/2016 2 Black M

2349 WA 9/23/2016 5 Unknown M

5333 XX 1/1/1000 0 other U

Enter your choice: U

Index: 0; Collisions: 0; 1111->

Index: 1; Collisions: 0; Empty

Index: 2; Collisions: 0; Empty

Index: 3; Collisions: 0; Empty

Index: 4; Collisions: 0; Empty

Index: 5; Collisions: 0; 2698->

Index: 6; Collisions: 0; 4183->

Index: 7; Collisions: 1; 1650-> 2931->

Index: 8; Collisions: 0; Empty

Index: 9; Collisions: 0; 2793->

Index: 10; Collisions: 0; Empty

Index: 11; Collisions: 0; Empty

Index: 12; Collisions: 0; 1802->

Index: 13; Collisions: 0; 2349->

Index: 14; Collisions: 1; 1230-> 4268->

Index: 15; Collisions: 0; 3212->

Index: 16; Collisions: 0; Empty

Index: 17; Collisions: 0; 3592->

Index: 18; Collisions: 0; Empty

Index: 19; Collisions: 0; 2894->

Index: 20; Collisions: 0; Empty

Index: 21; Collisions: 0; Empty

Index: 22; Collisions: 0; Empty

Index: 23; Collisions: 0; 4508->

Index: 24; Collisions: 0; Empty

Index: 25; Collisions: 0; 4517->

Index: 26; Collisions: 1; 3321-> 3678->

Index: 27; Collisions: 0; Empty

Index: 28; Collisions: 1; 1923-> 4023->

Index: 29; Collisions: 0; 3912->

Index: 30; Collisions: 0; 4459->

Index: 31; Collisions: 0; Empty

Index: 32; Collisions: 0; Empty

Index: 33; Collisions: 0; Empty

Index: 34; Collisions: 0; Empty

Index: 35; Collisions: 0; 3421->

Index: 36; Collisions: 1; 2498-> 5333->

Index: 37; Collisions: 0; 3857->

Index: 38; Collisions: 1; 2591-> 3795->

Index: 39; Collisions: 0; 3789->

Index: 40; Collisions: 0; Empty

Index: 41; Collisions: 0; Empty

Index: 42; Collisions: 0; 2231->

Index: 43; Collisions: 0; 1392->

Index: 44; Collisions: 0; 4592->

Index: 45; Collisions: 0; Empty

Index: 46; Collisions: 0; 1542->

Index: 47; Collisions: 0; Empty

Index: 48; Collisions: 0; 1467->

Enter your choice: E

Enter your choice: S

Load Factor : 57%

Total nodes : 33

Total collisions : 6

Enter your choice: W

Written to file.

Enter your choice: E

Goodbye!

Press any key to continue . . .

**Project Status**

|  |  |  |
| --- | --- | --- |
| Area | Programmer | Status/Comments |
| Unit 1: Team Coordination | Amrita | Smooth and regular coordination |
| Unit 2: BST Algorithms | Rasna | Coding almost done Search by secondary key remaining |
| Unit 3: Hash List Algorithms | Charu | Coding complete Logical error in deletion |
| Unit 4: Screen output | Amrita | Mostly done Input validation remaining |
| Unit 5: File I/O | Charu | Almost complete Write to File remaining |
| Test Plan Presentation Outline | Rasna | Plan and outline ready Presentation left |
| Project Documentation | Amrita | Almost complete |