**N puzzle Project**

**Team members:**

20180042

[company name]

Laila Gaber

Reham Salah

Shams Ali

Text

Description automatically generatedText

Description automatically generated with low confidenceText

Description automatically generatedText

Description automatically generatedGraphical user interface, text, application

Description automatically generatedText

Description automatically generated with low confidenceText

Description automatically generatedText

Description automatically generated with low confidenceA picture containing text

Description automatically generatedA picture containing table

Description automatically generated

Text

Description automatically generated with medium confidenceText

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Graphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

|  |  |  |
| --- | --- | --- |
|  | Hamming | Manhattan |
| Case1 | **Steps:18**  **Time: 00:00:10.3047737** | **Steps:18**  **Time: 00:00:11.4052101** |
| Case 2 | **Steps:18**  **Time: 00:00:00.0006055** | **Steps:18**  **Time: 00:00:00.0053191** |
| Case 3 | **Steps:38**  **Time: 00:00:00.0129030** | **Steps:38**  **Time: 00:00:00.0148562** |
| Case 4 | **Steps:4**  **Time: 00:00:00.4615619** | **Steps:4**  **Time: 00:00:01.0538943** |

\*Have the same number of steps but Hamming is faster than Manhattan.