Stevie Parris

CS 164

Homework 8:

2.

A. Using the heuristic presented in this section, apply the best-fit algorithm of Figure 10 to the problem of solving the following eight puzzle:

**(6)**

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 |  | 8 |
| 7 | 6 | 5 |

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
|  | 4 | 8 |
| 7 | 6 | 5 |

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 6 | 8 |
| 7 |  | 5 |

|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_|

|  |  |  |
| --- | --- | --- |
| 1 |  | 3 |
| 4 | 2 | 8 |
| 7 | 6 | 5 |

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 8 |  |
| 7 | 6 | 5 |

(7) **(5)** (5) (7)

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 8 | 5 |
| 7 | 6 |  |

|  |  |  |
| --- | --- | --- |
| 1 | 2 |  |
| 4 | 8 | 3 |
| 7 | 6 | 5 |

|\_\_\_\_\_\_\_\_|\_|

(7) **(4)**

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 8 | 5 |
| 7 |  | 6 |

|\_\_\_\_\_|\_\_\_\_\_|

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 8 |  |
| 7 | 6 | 5 |

(5) **(3)**

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 |  | 5 |
| 7 | 8 | 6 |

|

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 5 |  |
| 7 | 8 | 6 |

**(2)**

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
|  | 4 | 5 |
| 7 | 8 | 6 |

|  |  |  |
| --- | --- | --- |
| 1 |  | 3 |
| 4 | 2 | 5 |
| 7 | 8 | 6 |

|

(3) **(1)** (3)

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 |  |

|  |  |  |
| --- | --- | --- |
| 1 | 2 |  |
| 4 | 5 | 3 |
| 7 | 8 | 6 |

|\_\_\_\_\_\_|\_\_\_\_\_\_|

1. (2)

B. Find: ([A-z]{1,})([0-9]{1,})

Replace with: <b>\1 \2</b>

3. <http://www.pages.drexel.edu/~spp53/cs164/Pheonix/PheonixTheDog.html>

4. I did the extra credit.