

The following is a traceback of a given puzzle and requested algorithm, detailed in the assignment specifications.

```
Welcome to an 8-Puzzle Solver. Type '1' to use a default puzzle, or '2' to create your own.  
2
```

```
Enter your puzzle, using a zero to represent the blank. Please only enter valid  
8-puzzles. Enter the puzzle demilimiting the numbers with a space. RET only when  
finished.
```

```
Enter the first row: 1 2 3
```

```
Enter the second row: 4 0 6
```

```
Enter the third row: 7 5 8
```

```
Select algorithm. (1) for Uniform Cost Search, (2) for the Misplaced Tile  
Heuristic, or (3) the Manhattan Distance Heuristic.
```

```
3
```

```
[1, 2, 3]
```

```
[0, 4, 6]
```

```
[7, 5, 8]
```

```
[1, 2, 3]
```

```
[4, 5, 6]
```

```
[0, 7, 8]
```

```
[1, 0, 3]
```

```
[4, 2, 6]
```

```
[7, 5, 8]
```

```
[1, 2, 3]
```

```
[4, 5, 6]
```

```
[7, 0, 8]
```

```
[1, 2, 3]
```

```
[4, 6, 0]
```

```
[7, 5, 8]
```

```
[1, 2, 3]
```

```
[4, 0, 6]
```

```
[7, 5, 8]
```

```
Number of nodes expanded: 13
```

Max queue size: 8