

```
emir@ubuntu22:~/Desktop/210104004071$ make
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-----  
Cleaning...
```

```
-----  
Compiling...
```

```
-----  
Running the tests....
```

```
=====
```

Welcome to the 8-Puzzle Game!

Please Select an option:

1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit

choice :1

8 1 3

2 7 6

5 _ 4

Enter your move (number-direction, e.g, 2-R): 4-L

8 1 3

2 7 6

5 4 _

Enter your move (number-direction, e.g, 2-R): 6-D

8 1 3

2 7 _

5 4 6

Enter your move (number-direction, e.g, 2-R): 7-R

8 1 3

2 _ 7

5 4 6

Enter your move (number-direction, e.g, 2-R): 2-R

8 1 3

_ 2 7

5 4 6

Enter your move (number-direction, e.g, 2-R): 8-D

_ 1 3

8 2 7

5 4 6

Enter your move (number-direction, e.g, 2-R): 2-U

the move you entered is invalid! Try again.

_ 1 3

8 2 7

5 4 6

Enter your move (number-direction, e.g, 2-R): 8-D

the move you entered is invalid! Try again.

_ 1 3

8 2 7

5 4 6

Enter your move (number-direction, e.g, 2-R): 0-D

the move you entered is invalid! Try again.

```
  1 3
_ 2 7
5 4 6
Enter your move (number-direction, e.g, 2-R): asdf
the move you entered is invalid! Try again.
  1 3
_ 2 7
5 4 6
Enter your move (number-direction, e.g, 2-R): 1-L
1  3
8 2 7
5 4 6
Enter your move (number-direction, e.g, 2-R): 2-U
1 2 3
8  7
5 4 6
Enter your move (number-direction, e.g, 2-R): 8-R
1 2 3
  8 7
_ 4 6
5 4 6
Enter your move (number-direction, e.g, 2-R): 5-U
1 2 3
5 8 7
  4 6
_ 4 6
Enter your move (number-direction, e.g, 2-R): 4-L
1 2 3
5 8 7
4  6
Enter your move (number-direction, e.g, 2-R): 8-D
1 2 3
5  7
4 8 6
Enter your move (number-direction, e.g, 2-R): 7-L
1 2 3
5 7  _
4 8 6
Enter your move (number-direction, e.g, 2-R): 6-U
1 2 3
5 7 6
4 8  _
Enter your move (number-direction, e.g, 2-R): 8-R
1 2 3
5 7 6
4  8
_ 4 8
Enter your move (number-direction, e.g, 2-R): 7-D
1 2 3
5  6
4 7 8
Enter your move (number-direction, e.g, 2-R): 5-R
1 2 3
_ 5 6
```

```
4 7 8
Enter your move (number-direction, e.g, 2-R): 4-U
1 2 3
4 5 6
_ 7 8
Enter your move (number-direction, e.g, 2-R): 7-L
1 2 3
4 5 6
7 _ 8
Enter your move (number-direction, e.g, 2-R): 8-L
```

Congratulations, You won!Total number of moves: 23
Your score: 770
and this is new record !!!

Welcome to the 8-Puzzle Game!
Please Select an option:
1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit
choice :3

Best score is : 770
Welcome to the 8-Puzzle Game!
Please Select an option:
1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit
choice :4

Thanks for playing .=====

Completed tests....

emir@ubuntu22:~/Desktop/210104004071\$ █

100-games.txt

1	Initial state of the board :		
2	8	1	3
3	2	7	6
4	5	_	4
5	Move 1		
6	8	1	3
7	2	7	6
8	5	4	_
9	Move 2		
10	8	1	3
11	2	7	_
12	5	4	6
13	Move 3		
14	8	1	3
15	2	_	7
16	5	4	6
17	Move 4		
18	8	1	3
19	_	2	7
20	5	4	6
21	Move 5		
22	_	1	3
23	8	2	7
24	5	4	6
25	Move 6		
26	_	1	3
27	8	2	7
28	5	4	6
29	Move 7		
30	_	1	3
31	8	2	7
32	5	4	6
33	Move 8		
34	_	1	3
35	8	2	7
36	5	4	6
37	Move 9		
38	_	1	3
39	8	2	7
40	5	4	6
41	Move 10		
42	1	_	3
43	8	2	7
44	5	4	6

45 Move 11
46 1 2 3
47 8 _ 7
48 5 4 6
49 Move 12
50 1 2 3
51 _ 8 7
52 5 4 6
53 Move 13
54 1 2 3
55 5 8 7
56 _ 4 6
57 Move 14
58 1 2 3
59 5 8 7
60 4 _ 6
61 Move 15
62 1 2 3
63 5 _ 7
64 4 8 6
65 Move 16
66 1 2 3
67 5 7 _
68 4 8 6
69 Move 17
70 1 2 3
71 5 7 6
72 4 8 _
73 Move 18
74 1 2 3
75 5 7 6
76 4 _ 8
77 Move 19
78 1 2 3
79 5 _ 6
80 4 7 8
81 Move 20
82 1 2 3
83 _ 5 6
84 4 7 8
85 Move 21
86 1 2 3
87 4 5 6

83 _ _ _
84 4 7 8
85 Move 21
86 1 2 3
87 4 5 6
88 _ 7 8
89 Move 22
90 1 2 3
91 4 5 6
92 7 _ 8
93 Move 23
94 1 2 3
95 4 5 6
96 7 8 _
97

≡ best_score.txt	
1	770

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-----  
Cleaning...
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Compiling...
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Running the tests....
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```

Welcome to the 8-Puzzle Game!

Please Select an option:

1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit

choice :2


```
5 4 8
Computer Move : 7-R

1 2 3
_ 7 6
5 4 8
Computer Move : 5-U

1 2 3
5 7 6
_ 4 8
Computer Move : 4-L

1 2 3
5 7 6
4 _ 8
Computer Move : 7-D

1 2 3
5 _ 6
4 7 8
Computer Move : 5-R

1 2 3
_ 5 6
4 7 8
Computer Move : 4-U

1 2 3
4 5 6
_ 7 8
Computer Move : 7-L

1 2 3
4 5 6
7 _ 8
Computer Move : 8-L

1 2 3
4 5 6
7 8 _
Total number of computer moves: 34217
Welcome to the 8-Puzzle Game!
Please Select an option:
1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit
choice :4

Thanks for playing .=====
Completed tests....
emir@ubuntu22:~/Desktop/210104004071$
```

Computer Move : 8-D

2 3 6
1 4
7 5 8

Computer Move : 6-D

2 3
1 4 6
7 5 8

Computer Move : 3-R

2 3
1 4 6
7 5 8

Computer Move : 2-R

2 3
1 4 6
7 5 8

Computer Move : 1-U

1 2 3
4 6
7 5 8

Computer Move : 4-L

1 2 3
4 6
7 5 8

Computer Move : 5-U

1 2 3
4 5 6
7 8

Computer Move : 8-L

1 2 3
4 5 6
7 8

Total number of computer moves: 52261

Welcome to the 8-Puzzle Game!

Please Select an option:

1. Play game as a user
2. Finish the game with PC
3. Show the best score
4. Exit

choice :