Data Cleaning and Analysis Script for CSCI526 ChestNut Game Entropy

In [7]:
```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import math
import os

file_name = 'ChestNut_Data_10-10.csv'

line = '\n================================================================================\n'
```

In [8]:
```
df = pd.read_csv(file_name)
```

In [9]:
```
df.drop(columns=['Timestamp'], inplace=True)
```

In [10]:
```
display(df)
```

	Player ID	Tag	Time
0	638008380431898	lv0-start	638008515575231
1	638008380431898	lv0-item-redcube	638008515668920
2	638008380431898	lv0-item-redcube	638008515723151
3	638008380431898	lv0-item-bluecube	638008515973296
4	638008380431898	lv0-item-bluecube	638008515975293
...	...	...	...
4396	638009521531898	lv3-start	638010109205049
4397	638009521531898	lv3-item-redcube	638010109305071
4398	638009521531898	lv3-item-redcube	638010109316404
4399	638009521531898	lv3-cp-1	638010109356597
4400	638009521531898	lv3-settings	638010109468005

4401 rows × 3 columns

In [11]:
```
gb = df.groupby('Player ID')
player_list = [gb.get_group(x) for x in gb.groups]
```

In [12]:
```
start_list = ['lv0-start', 'lv1-start', 'lv2-start', 'lv3-start', 'lv4-start']
end_list = ['lv0-success', 'lv1-success', 'lv2-success', 'lv3-success', 'lv4-success',
            'lv0-death', 'lv1-death', 'lv2-death', 'lv3-death', 'lv4-death',
            'lv0-quit', 'lv1-quit', 'lv2-quit', 'lv3-quit', 'lv4-quit']
pause_list = ['lv0-pause', 'lv1-pause', 'lv2-pause', 'lv3-pause', 'lv4-pause']
resume_list = ['lv0-resume', 'lv1-resume', 'lv2-resume', 'lv3-resume', 'lv4-resume']
player_game_list = []

for player_df in player_list:
    #display(player_df)

    #print(player_game_list)
    player_df = player_df.sort_values(['Time'], ascending=True)
    game_list = []
    started = -1
    seq_list = []
    for index, row in player_df.iterrows():
        if row['Tag'] in start_list:
            if started == -1:
                started = start_list.index(row['Tag'])
                seq_list.append([row['Tag'], row['Time']])
            else:
                started = start_list.index(row['Tag'])
                seq_list = []
                seq_list.append([row['Tag'], row['Time']])
        elif row['Tag'] in end_list:
            if started != -1:
                seq_list.append([row['Tag'], row['Time']])
                game_list.append(seq_list)
                seq_list = []
                started = -1
        elif started != -1:
                seq_list.append([row['Tag'], row['Time']])
        #display(row['Tag'])
    player_game_list.append([player_df.iloc[0]['Player ID'],game_list])
```

In [13]:
```
level_name = ['Level 0', 'Level 1', 'Level 2', 'Level 3', 'Level 4']



for item in player_game_list:
    print(line)
    print('Player ID: %d'%(item[0]))
    for game in item[1]:
        print('\nPlayed Level %d'%(start_list.index(game[0][0])))
        for cp in game:
            print('%s '%(cp[0]), end='')
        print('\nGame Time: %f'%((game[len(game)-1][1] - game[0][1])/10000))
```

```
================================================================================

Player ID: 638008380431898

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 44.926800

Played Level 0
lv0-start lv0-settings lv0-resume lv0-settings lv0-quit
Game Time: 5.137000

Played Level 1
lv1-start lv1-item-redcube lv1-settings lv1-quit
Game Time: 11.981400

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 6.029900

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-settings lv2-quit
Game Time: 16.846200

Played Level 2
lv2-start lv2-item-key lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-settings lv2-quit
Game Time: 23.408200

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-death
Game Time: 57.597000

Played Level 2
lv2-start lv2-cp-1 lv2-item-key lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-bluecube
lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 133.315700

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-item-bluecube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-b
luecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 132.791300

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-settings lv3-quit
Game Time: 22.743200

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-settings lv4-quit
Game Time: 25.263700

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Player ID: 638008528272180

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-settings lv0-quit
Game Time: 22.620000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 39.843000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 137.964000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 3.297000

Played Level 2
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lv2-start lv2-settings lv2-quit
Game Time: 14.866000

Played Level 2
lv2-start lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-cp-3 lv2-death
Game Time: 62.839000

Played Level 2
lv2-start lv2-item-redcube lv2-item-key lv2-death
Game Time: 17.657000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-cp-2 lv2-settings lv2-resume lv2-item-key lv2-cp-3 lv2-death
Game Time: 86.021000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 54.874000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-settings lv1-quit
Game Time: 12.965000

Played Level 2
lv2-start lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2
-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 128.801000

Played Level 3
lv3-start lv3-settings lv3-resume lv3-settings lv3-quit
Game Time: 15.452000

Played Level 3
lv3-start lv3-settings lv3-quit
Game Time: 11.503000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 4.631000

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 3.074000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 4.478000

Played Level 3
lv3-start lv3-settings lv3-resume lv3-settings lv3-quit
Game Time: 7.041000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 3.205000

Played Level 3
lv3-start lv3-settings lv3-quit
Game Time: 2.519000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 21.244000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 5.211000

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.831000

Played Level 3
lv3-start lv3-settings lv3-quit
Game Time: 3.426000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 2.254000

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 7.855000

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 8.329000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 3.746000
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Played Level 3
lv3-start lv3-settings lv3-quit
Game Time: 3.025000

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.764000

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 4.450000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 12.498000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-settings lv3-quit
Game Time: 21.618000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-1 lv3-cp-2 lv3-item-key lv3-death
Game Time: 50.288000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 58.898000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-death
Game Time: 39.473000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-death
Game Time: 51.886000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-death
Game Time: 116.824000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-cp-3 lv3-cp-4 lv3-item-key lv3-cp-5 lv3-cp-6 lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube
lv3-item-redcube lv3-cp-9 lv3-item-key lv3-item-key lv3-item-key lv3-success
Game Time: 256.924000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 28.235000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-4 lv4-item-key lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-item-blu
ecube lv4-cp-7 lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-success
Game Time: 281.604000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-4 lv4-item-key lv4-cp-2 lv4-death
Game Time: 60.949000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-4 lv4-item-key lv4-cp-3 lv4-settings lv4-resume lv4-cp-5 lv4-settings lv4-resume lv4-cp-4 lv4-cp-5 lv4-cp-6
lv4-cp-7 lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-item-redcube lv4-success
Game Time: 239.113000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-settings lv1-quit
Game Time: 68.573000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 113.276000

Played Level 1
lv1-start lv1-item-redcube lv1-settings lv1-quit
Game Time: 11.848000

Played Level 2
lv2-start lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-cp-3 lv2-cp-5 lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 65.123000

Played Level 1
lv1-start lv1-settings lv1-resume lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 68.188000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-settings lv1-quit
Game Time: 86.736000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 75.686000
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Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 83.080000

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-it
em-bluecube lv2-item-bluecube lv2-death
Game Time: 72.864000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube
lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-redcube lv2-death
Game Time: 93.401000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcub
e lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-cp-4 lv2-it
em-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-success
Game Time: 161.339000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 34.872000

Played Level 3
lv3-start lv3-settings lv3-resume lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-item-redcube lv3-death
Game Time: 39.524000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-death
Game Time: 23.506000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-death
Game Time: 34.866000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 23.909000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 46.606000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-key lv3-death
Game Time: 46.710000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-death
Game Time: 27.166000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-key lv3-death
Game Time: 34.526000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 26.531000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-item-key lv3-item-redcube lv3-cp-3 lv3-cp-4 lv3-item-key lv3-cp-5 lv3-cp-6 lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv
3-death
Game Time: 137.726000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 22.746000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-key lv3-item-redcube lv3-cp-3 lv3-cp-4 lv3-item-key lv3-item-key lv3-item-key lv3-item-key lv3-cp-10 lv3-item-key lv3-success
Game Time: 90.109000

Played Level 4
lv4-start lv4-cp-0 lv4-settings lv4-quit
Game Time: 11.258000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-death
Game Time: 25.005000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-4 lv4-item-key lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-death
Game Time: 142.730000

Played Level 2
lv2-start lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-success
Game Time: 69.290000

Played Level 1
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lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 77.020000

Played Level 2
lv2-start lv2-cp-1 lv2-cp-4 lv2-success
Game Time: 52.543000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-settings lv3-quit
Game Time: 17.383000

Played Level 3
lv3-start lv3-settings lv3-resume lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-death
Game Time: 92.299000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-key lv3-cp-3 lv3-cp-4 lv3-item-key lv3-death
Game Time: 50.428000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-settings lv0-quit
Game Time: 25.767000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 53.205000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 18.085000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-item-bluec
ube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-death
Game Time: 105.320000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 69.989000

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Player ID: 638008529129280

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 53.747000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-settings lv1-resume lv1-success
Game Time: 66.336000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 39.113000

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Player ID: 638008533205420

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 83.742000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 76.967000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-settings lv1-resume lv1-item-redcube lv1-death
Game Time: 76.564000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 29.209000

Played Level 2
lv2-start lv2-item-key lv2-item-bluecube lv2-cp-2 lv2-death
Game Time: 31.382000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-cp-2 lv2-item-bluecube lv2-item-key lv2-death
Game Time: 64.798000

Played Level 2
lv2-start lv2-success
Game Time: 124.319000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-death
Game Time: 57.684000
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Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 37.889000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 48.814000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-key lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-4 lv3-item-key lv3-item-key lv3-cp-10 lv3-cp-1
1 lv3-item-key lv3-success
Game Time: 185.395000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 19.930000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-death
Game Time: 23.759000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-7 lv4-death
Game Time: 198.375000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-success
Game Time: 190.754000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-item-key lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4
-item-bluecube lv4-cp-7 lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-item-redcube lv4-success
Game Time: 243.076000

Played Level 3
lv3-start lv3-settings lv3-resume lv3-settings lv3-resume lv3-settings lv3-quit
Game Time: 76.768000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-death
Game Time: 58.005000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-death
Game Time: 27.798000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-3 lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bl
uecube lv3-item-bluecube lv3-death
Game Time: 132.998000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 37.655000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-3 lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bl
uecube lv3-item-bluecube lv3-cp-9 lv3-item-key lv3-item-key lv3-item-key lv3-cp-11 lv3-item-redcube lv3-item-key lv3-success
Game Time: 199.321000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 129.859000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-cp-2 lv2-item-key lv2-death
Game Time: 122.728000

Played Level 2
lv2-start lv2-item-redcube lv2-settings lv2-resume lv2-settings lv2-quit
Game Time: 114.396000

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 13.963000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube
lv2-item-redcube lv2-cp-0 lv2-settings lv2-resume lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-cp-4 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-redcube lv2-item-redcube lv2
-item-redcube lv2-item-key lv2-death
Game Time: 299.848000

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Player ID: 638008545287200

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-death
Game Time: 83.212000
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Player ID: 638008551386350

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-settings lv0-resume lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-settings lv0-resume lv0-success
Game Time: 115.641000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 86.050000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 31.802000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-cp-2 lv2-death
Game Time: 32.336000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-death
Game Time: 15.100000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-cp-2 lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-bluecube lv2-item-bluecube lv2-it
em-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-success
Game Time: 118.618000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-death
Game Time: 132.803000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-settings lv3-resume lv3-item-redcube lv3-item-redcube lv3-item-key lv3-death
Game Time: 47.015000

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Player ID: 638008566103940

Played Level 0
lv0-start lv0-item-redcube lv0-settings lv0-quit
Game Time: 28.286000

Played Level 0
lv0-start lv0-settings lv0-resume lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 64.324000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-death
Game Time: 47.246000

Played Level 1
lv1-start lv1-success
Game Time: 40.539000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-bluecube lv2-item-b
luecube lv2-item-bluecube lv2-success
Game Time: 113.451000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-death
Game Time: 33.075000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube l
v3-cp-4 lv3-item-key lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 130.628000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 35.234000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-cp-5
lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-cp-9 lv3-item-key lv3-item-key lv3-item-key lv3-cp-11 lv3-death
Game Time: 114.365000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-death
Game Time: 17.066000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-cp-5 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key
lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-9 lv3-item-key lv3-item-key lv3-item-key lv3-cp-1
1 lv3-success
Game Time: 139.091000

Played Level 4
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lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-item-key lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4
-cp-7 lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-item-redcube lv4-success
Game Time: 149.366000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcub
e lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-cp-4 lv2-death
Game Time: 109.585000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-settings lv3-quit
Game Time: 14.397000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-settings lv3-quit
Game Time: 12.768000

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Player ID: 638008569604387

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 95.035400

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 43.410100

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube
lv0-success
Game Time: 77.455800

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-cp-0 lv1-death
Game Time: 19.113900

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-cp-0 lv1-death
Game Time: 21.091600

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-cp-0 lv1-item-key lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-bluecube lv1-cp-1 lv1-death
Game Time: 21.493200

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-cp-0 lv1-item-redcube lv1-item-bluecube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-key lv1-cp-1 lv1-death
Game Time: 72.573700

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-cp-0 lv1-pause lv1-quit
Game Time: 7.723600

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-cp-0 lv1-item-redcube lv1-death
Game Time: 21.796400

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Player ID: 638008590269450

Played Level 0
lv0-start lv0-settings lv0-resume lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 102.679000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 86.634000

Played Level 2
lv2-start lv2-death
Game Time: 16.883000

Played Level 2
lv2-start lv2-cp-1 lv2-success
Game Time: 64.431000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-settings lv3-resume lv3-item-key lv3-death
Game Time: 109.536000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube
lv3-cp-4 lv3-item-key lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-cp-7 lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-cp-9 lv3-success
Game Time: 158.900000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-item-key lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4
-cp-7 lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-success
Game Time: 121.100000
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Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-ite
m-key lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-7 lv3-death
Game Time: 101.085000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-death
Game Time: 44.335000

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Player ID: 638008598878270

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-settings lv0-resume lv0-settings lv0-quit
Game Time: 55.677000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-success
Game Time: 116.408000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-settings lv1-quit
Game Time: 257.687000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-settings lv1-quit
Game Time: 159.648000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-success
Game Time: 101.126000

Played Level 2
lv2-start lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-death
Game Time: 72.144000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item
-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecub
e lv2-item-bluecube lv2-cp-1 lv2-cp-4 lv2-cp-1 lv2-death
Game Time: 185.095000

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Player ID: 638008600192706

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 42.580400

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 76.887500

Played Level 2
lv2-start lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-bluecube lv2-item-b
luecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 112.443500

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Player ID: 638008607941275

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-death
Game Time: 88.665700

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 53.361600

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 53.132600

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube
lv0-death
Game Time: 70.537800

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 52.622500

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Player ID: 638008632608830

Played Level 0
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lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-settings lv0-quit
Game Time: 101.535000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 97.708000

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Player ID: 638008637016265

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 94.093900

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 139.593400

Played Level 2
lv2-start lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-item-redcube lv2-item-bluecube lv2-cp-2 lv2-death
Game Time: 22.132800

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-bluecube lv2-item-key lv2-cp-3 lv2-death
Game Time: 97.053800

Played Level 2
lv2-start lv2-settings lv2-quit
Game Time: 4.540300

Played Level 2
lv2-start lv2-death
Game Time: 17.886800

Played Level 2
lv2-start lv2-death
Game Time: 26.467000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-cp-2 lv2-item-key lv2-item-key lv2-cp-3 lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-item-b
luecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 139.708700

Played Level 3
lv3-start lv3-item-redcube lv3-settings lv3-quit
Game Time: 11.420900

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-death
Game Time: 26.220200

Played Level 3
lv3-start lv3-settings lv3-quit
Game Time: 3.268300

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.440000

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 8.434500

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Player ID: 638008681827130

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 91.268000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 106.749000

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Player ID: 638008724562160

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 43.000000

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 9.830000

Played Level 1
lv1-start lv1-settings lv1-quit
Game Time: 9.321000
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Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 4.480000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-settings lv0-quit
Game Time: 66.247000

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Player ID: 638009092104990

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 39.906100

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 95.033200

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 68.106200

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-pause lv0-resume lv0-death
Game Time: 139.535900

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 44.895600

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 34.768500

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 80.742400

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-cp-1 lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube
lv0-success
Game Time: 57.750500

Played Level 1
lv1-start lv1-pause lv1-quit
Game Time: 13.397100

Played Level 1
lv1-start lv1-pause lv1-quit
Game Time: 3.079200

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-pause lv1-quit
Game Time: 47.002500

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-cp-0 lv1-item-key lv1-item-bluecube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-cp-1 lv1-success
Game Time: 43.901900

Played Level 2
lv2-start lv2-item-bluecube lv2-death
Game Time: 49.593100

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-pause lv2-quit
Game Time: 77.211400

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-death
Game Time: 92.389200

Played Level 2
lv2-start lv2-pause lv2-quit
Game Time: 7.786400

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-death
Game Time: 79.853300

Played Level 2
lv2-start lv2-death
Game Time: 24.280100

Played Level 0
lv0-start lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-cp-0 lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-death
Game Time: 53.761000

Played Level 2
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lv2-start lv2-death
Game Time: 26.539100

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 33.815500

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-death
Game Time: 45.062300

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-1 lv3-ite
m-redcube lv3-item-redcube lv3-cp-3 lv3-pause lv3-quit
Game Time: 174.243400

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-1 lv3-ite
m-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-cp-5 lv3-cp-4 lv3-death
Game Time: 129.741400

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 26.810700

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-1 lv3-death
Game Time: 29.987100

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-death
Game Time: 13.117600

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-pause lv3-quit
Game Time: 3.476400

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-death
Game Time: 34.391500

Played Level 2
lv2-start lv2-death
Game Time: 12.785100

Played Level 2
lv2-start lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-success
Game Time: 41.858200

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-1 lv3-item-redcube lv3-item
-redcube lv3-cp-3 lv3-cp-6 lv3-success
Game Time: 71.359300

Played Level 4
lv4-start lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-bluecube lv4-death
Game Time: 24.831100

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-pause lv4-quit
Game Time: 17.009200

Played Level 4
lv4-start lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 34.369100

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-pause lv4-quit
Game Time: 40.466200

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-pause lv4-resume lv4-pause lv4-quit
Game Time: 23.566100

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-key lv4-death
Game Time: 162.978300

Played Level 4
lv4-start lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 47.669500

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 27.356100

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 63.751100

Played Level 4
```

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lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-bluecube lv4-item-bluecube lv4-item-key lv4-item-redcube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-
death
Game Time: 135.973800

Played Level 4
lv4-start lv4-item-redcube lv4-item-redcube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-death
Game Time: 25.343000

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-key lv4-death
Game Time: 120.116000

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-item-key lv4-item-bluecube lv4-item-bluecube lv4-death
Game Time: 41.973600

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 27.623700

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-bluecube lv4-pause lv4-quit
Game Time: 52.256900

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-pause lv4-quit
Game Time: 22.251800

Played Level 4
lv4-start lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 26.446000

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Player ID: 638009113498590

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 108.666000

Played Level 1
lv1-start lv1-death
Game Time: 9.848000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 91.229000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-success
Game Time: 75.770000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-bluecube lv2
-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-death
Game Time: 58.393000

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube
lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-i
tem-bluecube lv2-item-bluecube lv2-item-key lv2-death
Game Time: 192.245000

Played Level 2
lv2-start lv2-cp-1 lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-success
Game Time: 88.774000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-death
Game Time: 44.204000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-death
Game Time: 30.437000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-cp-2 lv3-death
Game Time: 32.255000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-death
Game Time: 32.019000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 35.774000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 50.360000
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Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 43.158000

Played Level 3
lv3-start lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-death
Game Time: 36.357000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-death
Game Time: 56.394000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3
-item-bluecube lv3-item-bluecube lv3-death
Game Time: 128.040000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-redcube lv3-item-bluecube lv3-
item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-7 lv
3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 218.751000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 63.759000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-
item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcube lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-death
Game Time: 160.652000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 35.507000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 42.349000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 66.834000

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Player ID: 638009312046197

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 50.322000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 74.949300

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-redcube lv2-cp-2 lv2-item-key lv2-settings lv2-quit
Game Time: 40.349900

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-death
Game Time: 39.858700

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-blue
cube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-bluecu
be lv2-item-bluecube lv2-cp-4 lv2-success
Game Time: 154.637700

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 25.707000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
Game Time: 23.285000

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Player ID: 638009365901650

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-settings lv0-quit
Game Time: 19.057000

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 55.543000

Played Level 1
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lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-settings lv1-quit
Game Time: 95.399000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 41.085000

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-cp-2 lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-settings lv2-quit
Game Time: 31.931000

Played Level 2
lv2-start lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-cp-2 lv2-settings lv2-quit
Game Time: 20.380000

Played Level 2
lv2-start lv2-success
Game Time: 20.734000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-item-redcube lv3-item-key lv3-cp-3 lv3-cp-5 lv3-item-bluecube lv3-item-bluecube lv3-settings lv3-quit
Game Time: 81.617000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-settings lv3-quit
Game Time: 20.332000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcu
be lv3-item-redcube lv3-cp-5 lv3-item-redcube lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-cp-9 lv3-item-redcube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-success
Game Time: 163.491000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-4 lv4-death
Game Time: 49.171000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-cp-5 lv4-cp-4 lv4-item-redcube lv4-cp-8 lv4-success
Game Time: 98.588000

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Player ID: 638009396645133

Played Level 0
lv0-start lv0-pause lv0-quit
Game Time: 4.066900

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Player ID: 638009436951937

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.660100

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 64.863400

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 123.935400

Played Level 2
lv2-start lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-2 lv2-item-key lv2-death
Game Time: 30.788700

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Player ID: 638009438230210

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 46.784000

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 116.917000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-settings lv2-quit
Game Time: 41.024000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-cp-2 lv2-item-key lv2-cp-3 lv2-item-bluecube lv2-item-key lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-5 lv2-success
Game Time: 111.856000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv
3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube l
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v3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 189.641000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-key lv3-death
Game Time: 65.129000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-key lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube l
v3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube
lv3-item-redcube lv3-cp-9 lv3-cp-11 lv3-item-key lv3-item-key lv3-death
Game Time: 164.249000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-redcube lv3-item-r
edcube lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-cp-9 lv3-cp-11 lv3-item-key lv3-item-key lv3-
item-key lv3-success
Game Time: 172.278000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-death
Game Time: 20.751000

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-cp-1 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4-cp-2 lv4-cp-3 lv4-cp-5 lv4-cp-4 lv4-item-key lv4-cp-5 lv4-cp-6 lv4-item-bluecube lv4-item-bluecube lv4-item-bluecube lv4
-item-bluecube lv4-cp-7 lv4-item-redcube lv4-item-redcube lv4-cp-8 lv4-success
Game Time: 155.231000

Played Level 4
lv4-start lv4-cp-0 lv4-settings lv4-quit
Game Time: 35.076000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-key lv3-item-redcube lv3-cp-3 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-4 lv3-item-key lv3-item-r
edcube lv3-item-redcube lv3-item-redcube lv3-cp-5 lv3-cp-6 lv3-item-redcube lv3-item-redcube lv3-cp-8 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-redcube lv3-item-redcube lv3-cp-9 lv3-item-key lv3-item-k
ey lv3-item-key lv3-cp-10 lv3-item-key lv3-item-redcube lv3-success
Game Time: 184.853000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcub
e lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-death
Game Time: 79.666000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-key lv2-item-key lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-redcub
e lv2-item-redcube lv2-cp-0 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-item-key lv2-item-redcube lv2-item-redcube lv2-item-bluecube lv2-item-bluecube lv2-cp-4 lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-item-redcube lv2-i
tem-redcube lv2-item-redcube lv2-item-redcube lv2-success
Game Time: 128.888000

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

Player ID: 638009460197230

Played Level 4
lv4-start lv4-cp-0 lv4-item-redcube lv4-item-redcube lv4-death
Game Time: 17.956000

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

Player ID: 638009466715030

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-settings lv0-resume lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 62.281000

Played Level 1
lv1-start lv1-settings lv1-resume lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-death
Game Time: 81.185000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-death
Game Time: 68.071000

Played Level 1
lv1-start lv1-death
Game Time: 75.107000

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 171.967000

Played Level 2
lv2-start lv2-item-redcube lv2-item-redcube lv2-item-redcube lv2-item-key lv2-item-bluecube lv2-cp-2 lv2-item-key lv2-death
Game Time: 51.569000

Played Level 2
lv2-start lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-cp-1 lv2-cp-4 lv2-item-redcube lv2-item-redcube lv2-success
Game Time: 67.825000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-cp-2 lv3-death
```

```
Game Time: 33.893000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-death
Game Time: 40.219000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 34.590000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-death
Game Time: 35.114000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-death
Game Time: 26.422000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 46.839000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 47.373000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 54.801000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-cp-3 lv3-death
Game Time: 89.453000

Played Level 3
lv3-start lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-0 lv3-item-redcube lv3-item-redcube lv3-item-key lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 60.792000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-item-bluecube lv3-cp-2 lv3-item-redcube lv3-item-redcube lv3-item-redcube lv3-death
Game Time: 37.079000

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-death
Game Time: 18.043000

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

Player ID: 638009470591461

Played Level 0
lv0-start lv0-pause lv0-resume lv0-pause lv0-quit
Game Time: 25.154100

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

Player ID: 638009521531898

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 42.445400

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-success
Game Time: 23.878300

Played Level 2
lv2-start lv2-cp-1 lv2-success
Game Time: 50.497900

Played Level 3
lv3-start lv3-item-redcube lv3-item-redcube lv3-cp-1 lv3-death
Game Time: 16.491500

Played Level 0
lv0-start lv0-item-redcube lv0-settings lv0-quit
Game Time: 10.494100

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 7.285000

Played Level 0
lv0-start lv0-item-redcube lv0-settings lv0-quit
Game Time: 17.328400

Played Level 1
lv1-start lv1-item-bluecube lv1-item-bluecube lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-settings lv1-quit
Game Time: 19.112200

Played Level 0
```

```
lv0-start lv0-settings lv0-quit
Game Time: 6.064700

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.151500

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.914400

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.925600

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.165000

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 14.514100

Played Level 0
lv0-start lv0-settings lv0-quit
Game Time: 2.690300

Played Level 0
lv0-start lv0-item-redcube lv0-item-redcube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-item-bluecube lv0-success
Game Time: 59.115400

Played Level 1
lv1-start lv1-item-redcube lv1-item-redcube lv1-item-redcube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-item-bluecube lv1-success
Game Time: 66.236800

Played Level 2
lv2-start lv2-cp-1 lv2-item-bluecube lv2-item-bluecube lv2-item-bluecube lv2-item-redcube lv2-success
Game Time: 59.111400

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

Player ID: 638009670359330
```

In [14]:

```
sorted_data = [[[],[],[]],[[],[],[]],[[],[],[]],[[],[],[]],[[],[],[]]]
#sorted_data schema: [#Level:[ #succes:[], #died:[], #quit:[] ] ]

for item in player_game_list:
    #print(line)
    #print('Player ID: %d'%(item[0]))
    for game in item[1]:
        pause_time = 0
        pause_start = 0
        pause = False
        for cp in game:
            if cp[0] in pause_list:
                pause_start = cp[1]
                pause = True
            elif pause and (cp[0] in resume_list or cp[0] in end_list):
                pause_time += cp[1] - pause_start
                pause = False

        game_time = ((game[len(game)-1][1] - game[0][1]) - pause_time)/10000
        level = start_list.index(game[0][0])
        ending = int(end_list.index(game[len(game)-1][0]) / 5)
        #print(game_time)
        #print(pause_time)
        #print('Level %d, ending %d'%(level,ending))
        sorted_data[level][ending].append([game, game_time])
```

In [31]:

```
level_labels = ['Level 0', 'Level 1', 'Level 2', 'Level 3', 'Level 4']
def game_stat_painter(labels, sub_labels, data, title, unit, sub_color = None, x_rotation = 0, label_format = '%d'):
    label_size = 12
    font_size = 18
    title_size = 22
    bar_count = len(data[0])

    if bar_count != len(sub_labels):
        print('Wrong Input Size!')
        return

    bar_width = 0.7 / bar_count

    x = np.arange(len(labels))  # the label locations
    fig, ax = plt.subplots(figsize=(15, 10))
    for i in range(bar_count):
        single_bar_data = [data_list[i] for data_list in data]
        offset = -0.35 + i*bar_width + (bar_width/2)
        if sub_color != None:
            rects = ax.bar(x+offset , single_bar_data, bar_width, label=sub_labels[i], color = sub_color[i])
```

```
        else:
            rects = ax.bar(x+offset , single_bar_data, bar_width, label=sub_labels[i])
        if x_rotation != 0:
            ax.bar_label(rects, fmt = label_format, padding=3, fontsize = label_size, rotation='vertical')
        else:
            ax.bar_label(rects, fmt = label_format, padding=3, fontsize = label_size)

    ax.set_ylabel(unit, fontsize = font_size)
    ax.set_title(title, fontsize = title_size)
    if x_rotation != 0:
        ax.set_xticks(x, ha="right", rotation = x_rotation, rotation_mode="anchor")
    else:
        ax.set_xticks(x)
    ax.set_xticklabels(labels)
    ax.tick_params(axis='both', which='both', labelsize=font_size)
    plt.margins(y=0.2)
    ax.legend(fontsize = font_size)
    #fig.tight_layout()
    plt.show()
```

In [32]:

```
avg_play_time = []
for i in range(5):
    avg_play_time.append([0,0,0])

#succes:[], #died:[], #quit:[]

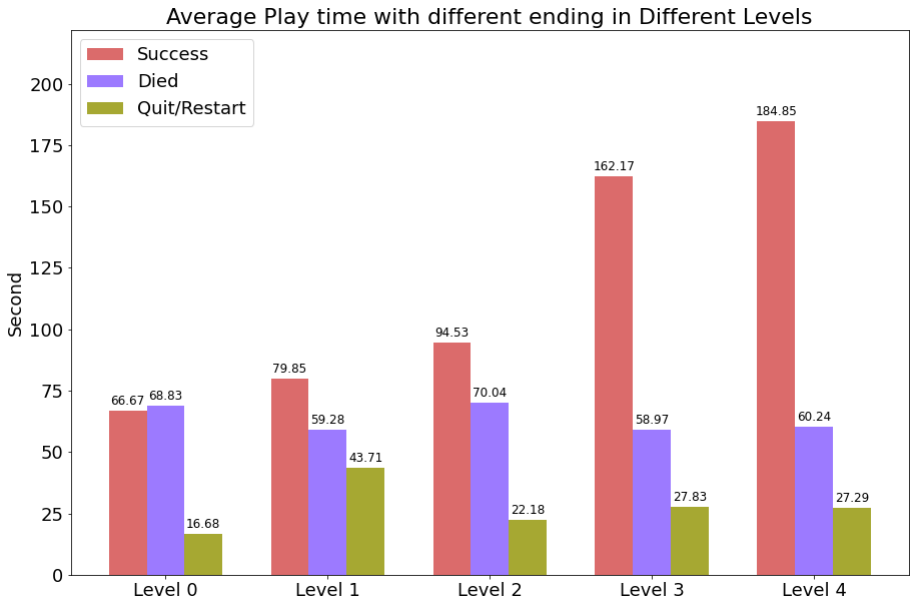
for lv in range(5):
    for i in range(3):
        sum = 0
        counter = 0
        for item in sorted_data[lv][i]:
            counter += 1
            sum += item[1]
        avg_time = sum / counter
        avg_play_time[lv][i] = avg_time

        print('Average level game time for %d level%d is %fS'%(i,sorted_data.index(level), avg_time))
print(avg_play_time)
```

```
Average level game time for 0 level4 is 66.673043S
Average level game time for 1 level4 is 68.825627S
Average level game time for 2 level4 is 16.676626S
Average level game time for 0 level4 is 79.853436S
Average level game time for 1 level4 is 59.282425S
Average level game time for 2 level4 is 43.708737S
Average level game time for 0 level4 is 94.529213S
Average level game time for 1 level4 is 70.043829S
Average level game time for 2 level4 is 22.176367S
Average level game time for 0 level4 is 162.172130S
Average level game time for 1 level4 is 58.969458S
Average level game time for 2 level4 is 27.832189S
Average level game time for 0 level4 is 184.854000S
Average level game time for 1 level4 is 60.240559S
Average level game time for 2 level4 is 27.292825S
[[66.67304333333333, 68.82562666666666, 16.676625925925926], [79.85343636363638, 59.282424999999996, 43.70873684210526], [94.52921304347824, 70.04382941176472, 22.176366666666667], [162.17213, 58.96945789473684, 27.83218888888889], [184.85399999999998, 60.24005590909090908, 27.292825]]
```

In [34]:

```
game_stat_painter(level_labels, ['Success', 'Died', 'Quit/Restart'],
                  avg_play_time, 'Average Play time with different ending in Different Levels', 'Second',
                sub_color=['#db6b6b', '#9c7aff', '#a6a832'], label_format= '%.2f')
```



In [207…

```
for level in sorted_data:
    sum = 0
    counter = 0
    for item in level[1]:
        counter += 1
        sum += item[1]
    avg_time = sum / counter
    print('Average level game time for level%d is %fS'%(sorted_data.index(level), avg_time))
```

```
Average level game time for level0 is 68.825627S
Average level game time for level1 is 59.282425S
Average level game time for level2 is 70.043829S
Average level game time for level3 is 58.969458S
Average level game time for level4 is 60.240559S
```

In [208…

```
for level in sorted_data:
    sum = 0
    counter = 0
    for item in level[2]:
        counter += 1
        sum += item[1]
    avg_time = sum / counter
    print('Average level game time for level%d is %fS'%(sorted_data.index(level), avg_time))
```

```
Average level game time for level0 is 16.676626S
Average level game time for level1 is 43.708737S
Average level game time for level2 is 22.176367S
Average level game time for level3 is 27.832189S
Average level game time for level4 is 27.292825S
```

Collected Items

In [210…

```
#item_count format: #Level:[ #red, #blue, #key ] cp format lv#-item-redcube
item_count = []


for i in range(5):
    item_count.append([0,0,0])

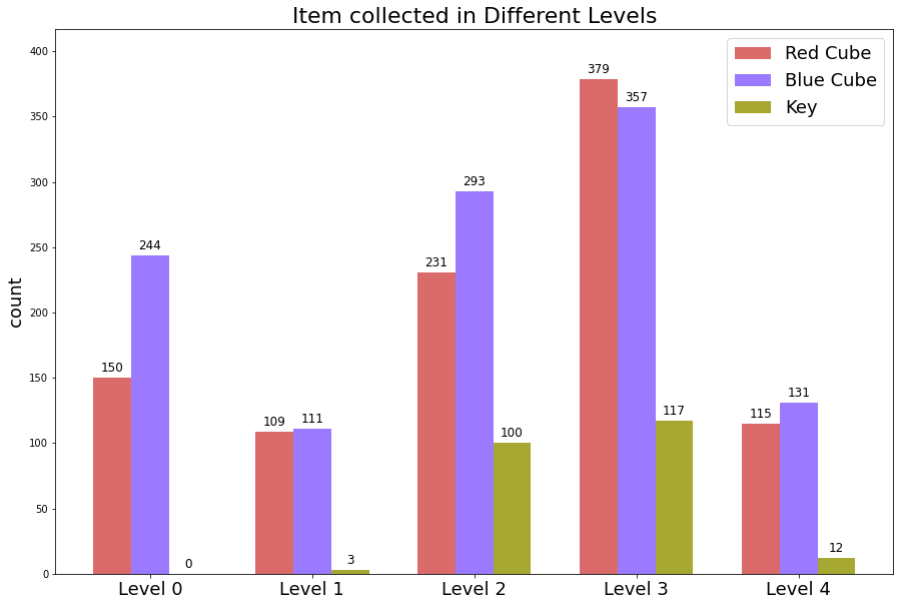
for i in range(len(sorted_data)):
    for game_list in sorted_data[i]:
        for game_data in game_list:
            for check_pts in game_data[0]:
                if 'redcube' in check_pts[0]:
                    item_count[int(check_pts[0][2])][0] += 1
                elif 'bluecube' in check_pts[0]:
                    item_count[int(check_pts[0][2])][1] += 1
                elif 'key' in check_pts[0]:
                    item_count[int(check_pts[0][2])][2] += 1
```

```
print(item_count )
```

```
[[150, 244, 0], [109, 111, 3], [231, 293, 100], [379, 357, 117], [115, 131, 12]]
```

In [211…

```
game_stat_painter(level_labels, ['Red Cube', 'Blue Cube', 'Key'],
                  item_count, 'Item collected in Different Levels', 'count', sub_color=['#db6b6b', '#9c7aff', '#a6a832'])
```



In [212…

```
#item_count format: #Level:[ #red, #blue, #key ] cp format lv#-item-redcube
succ_item_count = []

#sorted_data schema: [#Level:[ #succes:[], #died:[], #quit:[] ] ]

for i in range(5):
    succ_item_count.append([0,0,0])

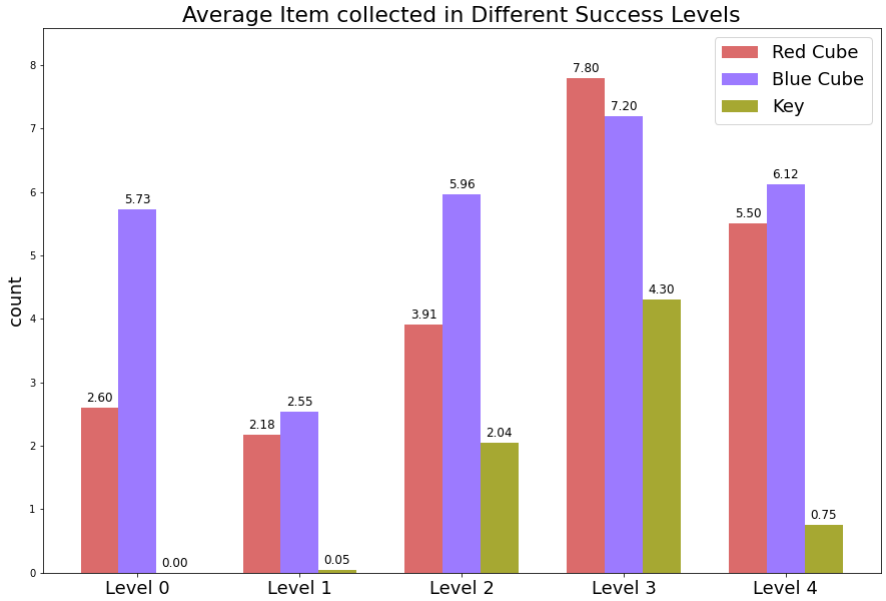
for i in range(len(sorted_data)):
    success_time = len(sorted_data[i][0])
    for game_data in sorted_data[i][0]:
        for check_pts in game_data[0]:
            if 'redcube' in check_pts[0]:
                succ_item_count[int(check_pts[0][2])][0] += 1
            elif 'bluecube' in check_pts[0]:
                succ_item_count[int(check_pts[0][2])][1] += 1
            elif 'key' in check_pts[0]:
                succ_item_count[int(check_pts[0][2])][2] += 1

for i in range(5):
    for j in range(3):
        succ_item_count[i][j] /= len(sorted_data[i][0])
print(succ_item_count)
```

```
[[2.6, 5.733333333333333, 0.0], [2.1818181818181817, 2.5454545454545454, 0.045454545454545456], [3.9130434782608696, 5.956521739130435, 2.0434782608695654], [7.8, 7.2, 4.3], [5.5, 6.125, 0.75]]
```

In [222…

```
game_stat_painter(level_labels, ['Red Cube', 'Blue Cube', 'Key'],
                  succ_item_count, 'Average Item collected in Different Success Levels', 'count', sub_color=['#db6b6b', '#9c7aff', '#a6a832'], label_format='%.2f')
```



Game Play Stat

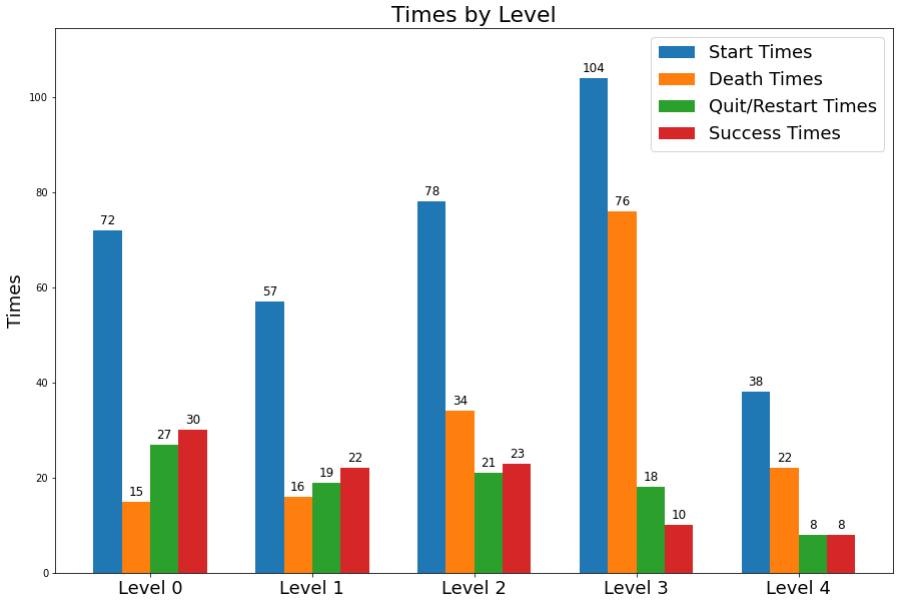
In [214…

```
#Statistics format: #Level:[ #Start Count, #Death Count, #Quit Count, #Success Count ]
statistics = []

for i in range(len(sorted_data)):
    succ_count = len(sorted_data[i][0])
    died_count = len(sorted_data[i][1])
    quit_count = len(sorted_data[i][2])
    statistics.append([succ_count + died_count + quit_count, died_count, quit_count, succ_count])
```

In [224…

```
game_stat_painter(level_labels, ['Start Times', 'Death Times', 'Quit/Restart Times', 'Success Times'],
                  statistics, 'Times by Level', 'Times')
```



Check Point Stat

In [228…

```
#Level_cp_stat format: #Level:[ #cp1_count, .... ] cp format Lv#-cp-#
level_cp_stat = []


for i in range(5):
    level_cp_stat.append([])

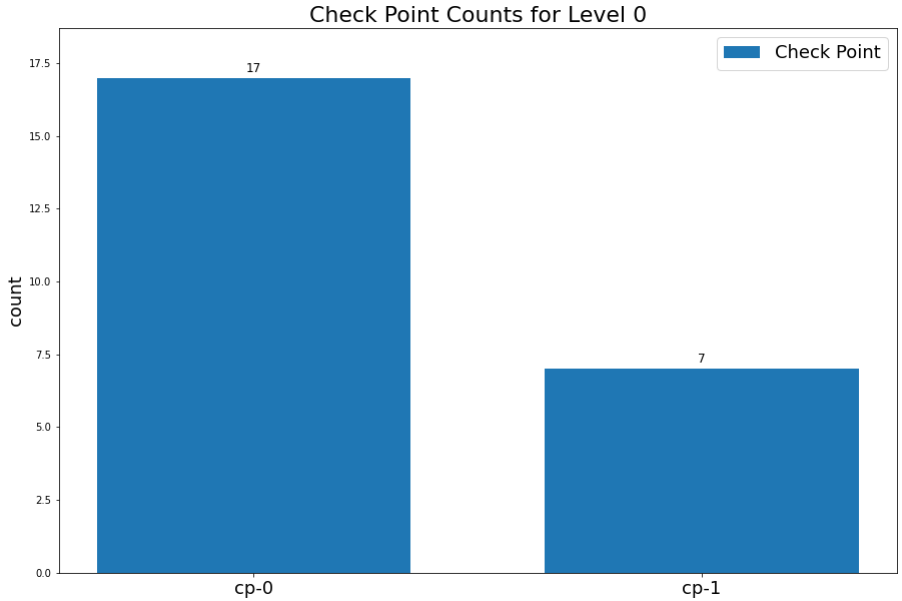
for i in range(len(sorted_data)):
    for game_list in sorted_data[i]:
        for game_data in game_list:
            for check_pts in game_data[0]:
                if 'cp' in check_pts[0]:
                    cp_num = int(check_pts[0][-1])
                    lv_num = int(check_pts[0][2])
                    if len(level_cp_stat[lv_num]) < cp_num+1:
                        for i in range(cp_num - len(level_cp_stat[lv_num]) + 1):
                            level_cp_stat[lv_num].append(0)
                    level_cp_stat[lv_num][cp_num] += 1

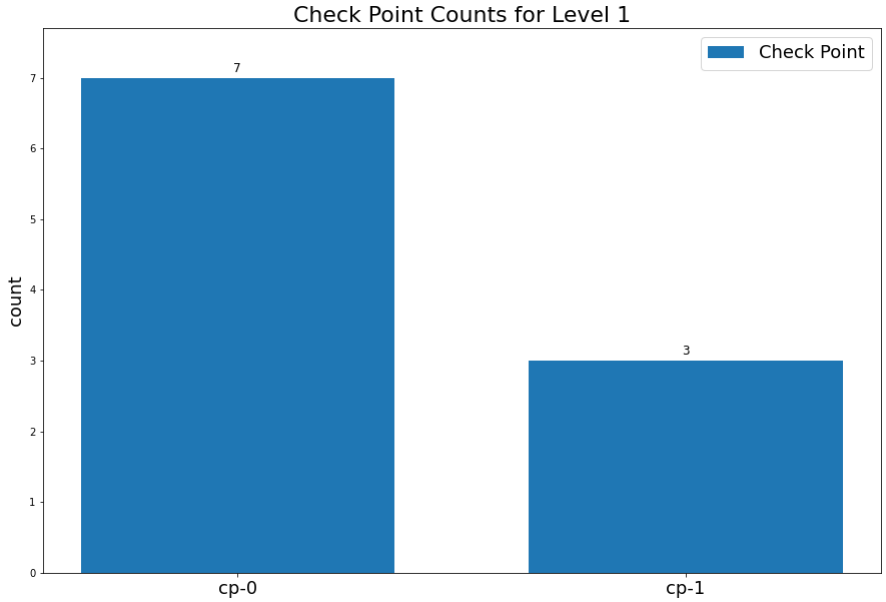
print(level_cp_stat)
```

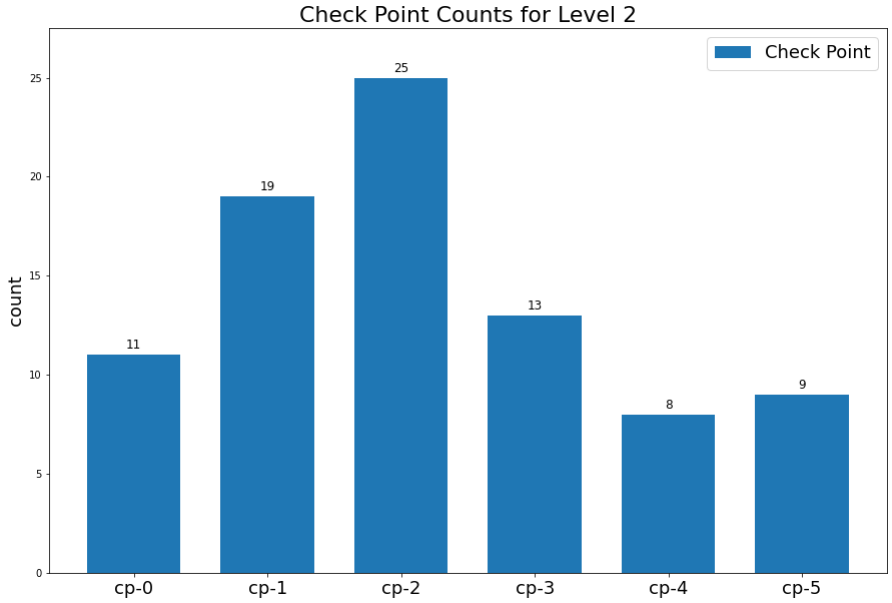
```
[[17, 7], [7, 3], [11, 19, 25, 13, 8, 9], [45, 58, 68, 25, 19, 19, 17, 3, 15, 9], [21, 15, 13, 11, 14, 16, 7, 7, 8]]
```

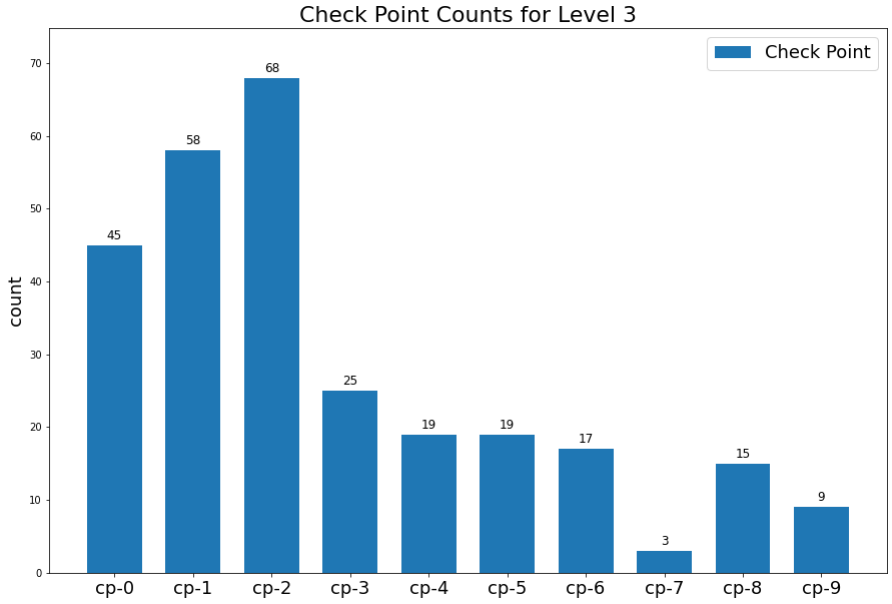
In [229…

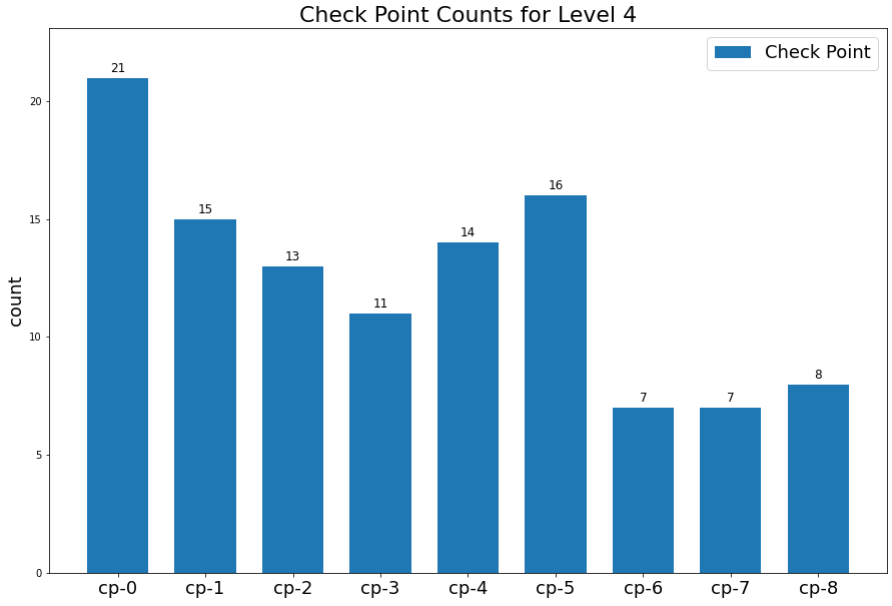
```
for i in range(5):
    game_stat_painter(['cp-'+str(i) for i in range(len(level_cp_stat[i]))], ['Check Point'],
                      [[count] for count in level_cp_stat[i]], 'Check Point Counts for Level ' + str(i), 'count')
```


Check Point Counts for Level 0
Check Point
count
17
7
cp-0
cp-1


Check Point Counts for Level 1
Check Point
count
7
3
cp-0
cp-1


Check Point Counts for Level 2
Check Point
count
11
19
25
13
8
9
cp-0
cp-1
cp-2
cp-3
cp-4
cp-5


Check Point Counts for Level 3
Check Point
count
45
58
68
25
19
19
17
3
15
9
cp-0
cp-1
cp-2
cp-3
cp-4
cp-5
cp-6
cp-7
cp-8
cp-9



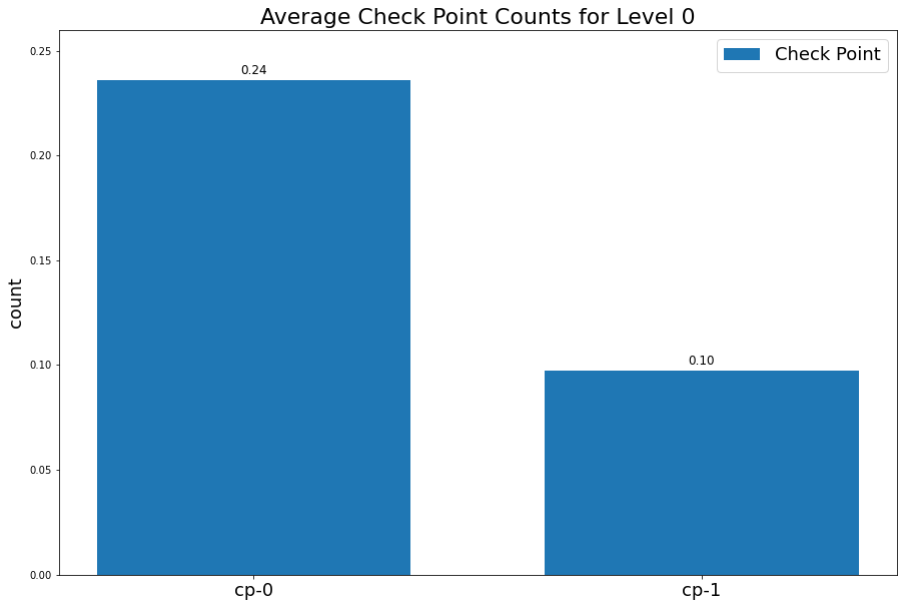
In [230…

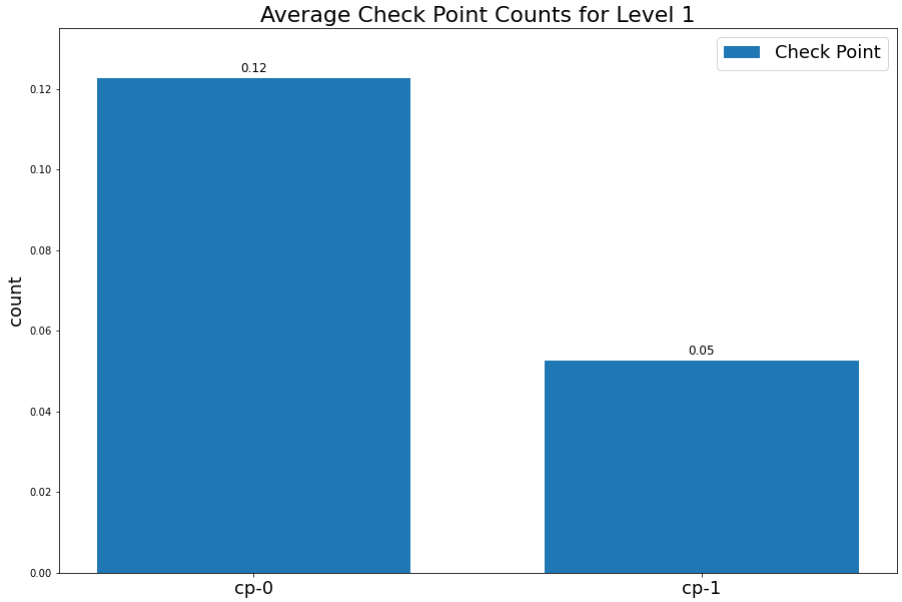
```
avg_level_cp_stat = []
for i in range(len(level_cp_stat)):
    avg_count = []
    for cp_count in level_cp_stat[i]:
        avg_count.append(cp_count / statistics[i][0])
    avg_level_cp_stat.append(avg_count)
print(avg_level_cp_stat)
```

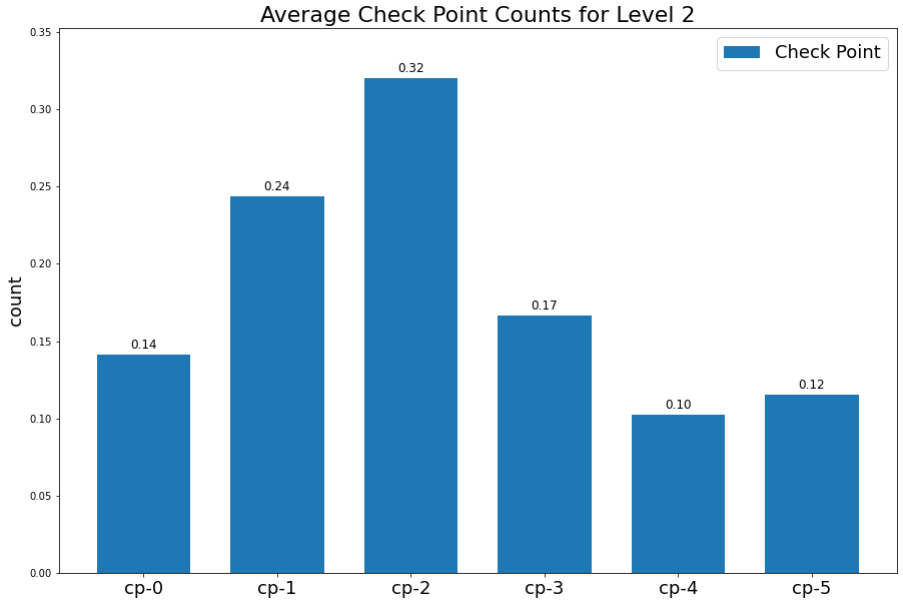
```
[[0.2361111111111111, 0.09722222222222222], [0.12280701754385964, 0.05263157894736842], [0.14102564102564102, 0.24358974358974358, 0.32051282051282054, 0.16666666666666666, 0.10256410256410256, 0.11538461538461539], [0.4326923076923077, 0.5576923076923077,
0.6538461538461539, 0.2403846153846154, 0.18269230769230768, 0.18269230769230768, 0.16346153846153846, 0.028846153846153848, 0.14423076923076922, 0.08653846153846154], [0.5526315789473685, 0.39473684210526316, 0.34210526315789475, 0.2894736842105263, 0.36842
10526315789, 0.42105263157894735, 0.18421052631578946, 0.18421052631578946, 0.21052631578947367]]
```

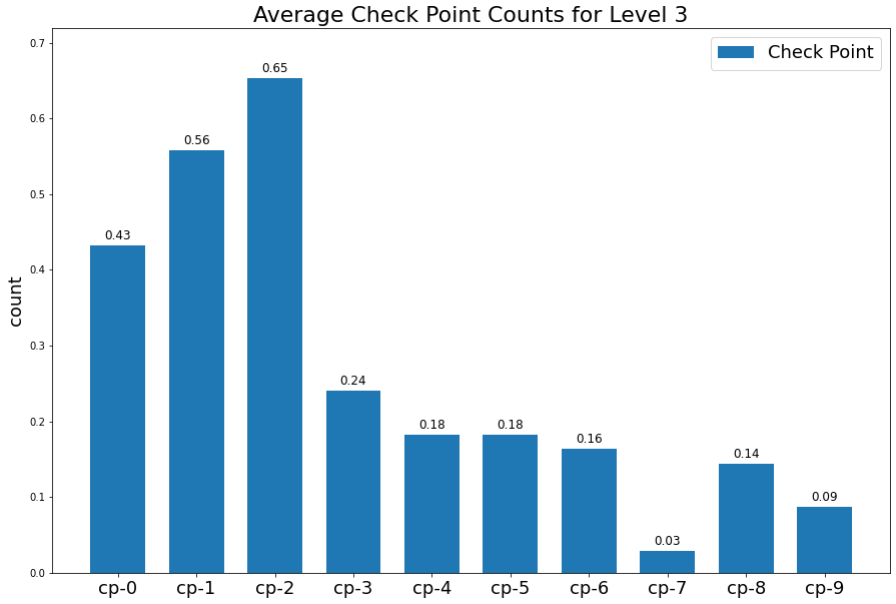
In [231…

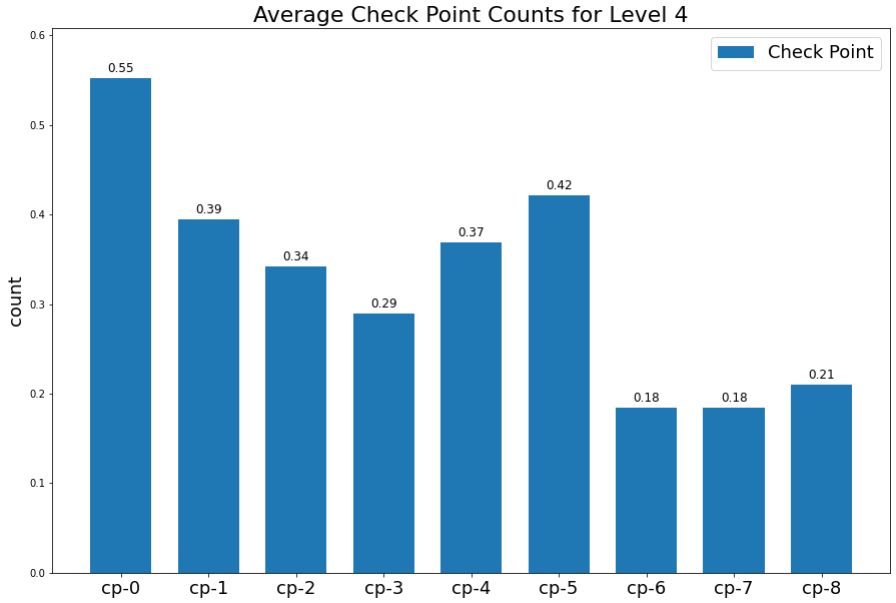
```
for i in range(5):
    game_stat_painter(['cp-'+str(i) for i in range(len(level_cp_stat[i]))], ['Check Point'],
                      [[count] for count in avg_level_cp_stat[i]], 'Average Check Point Counts for Level ' + str(i), 'count', label_format='%.2f')
```


Average Check Point Counts for Level 0
Check Point
count
0.24
0.10
cp-0
cp-1


Average Check Point Counts for Level 1
Check Point
count
0.12
0.05
cp-0
cp-1


Average Check Point Counts for Level 2
Check Point
count
0.14
0.24
0.32
0.17
0.10
0.12
cp-0
cp-1
cp-2
cp-3
cp-4
cp-5


Average Check Point Counts for Level 3
Check Point
count
0.43
0.56
0.65
0.24
0.18
0.18
0.16
0.03
0.14
0.09
cp-0
cp-1
cp-2
cp-3
cp-4
cp-5
cp-6
cp-7
cp-8
cp-9



Period Stat

In [232…

```
#Level_cp_stat format: #Level:[ #cp1_count, .... ] cp format Lv#-cp-#
level_cp_stat = []
movement_dict = []


for i in range(5):
    movement_dict.append({})

for i in range(len(sorted_data)):
    for game_list in sorted_data[i]:
        for game_data in game_list:
            cp_start = None
            start_time = 0
            pause_start = 0
            pause_time = 0
            for check_pts in game_data[0]:
                if any((cp_str in check_pts[0]) for cp_str in ['cp', 'start', 'quit', 'success', 'death']):
                    if cp_start != None:
                        level_num = int(check_pts[0][2])
                        time_period = check_pts[1] - start_time - pause_time
                        if time_period < 0:
                            print('Start time = %d, pause time = %d'%(start_time,pause_time))
                            print('current cp is %s, last cp is %s'%(check_pts[0],cp_start))
                        pause_time = 0
                        movement_tuple = (cp_start, check_pts[0])
                        if movement_tuple in movement_dict[level_num]:
                            movement_dict[level_num][movement_tuple].append(time_period)
                        else:
                            movement_dict[level_num][movement_tuple] = [time_period]
                    cp_start = check_pts[0]
                    start_time = check_pts[1]
                elif 'pause' in check_pts[0] or 'setting' in check_pts[0]:
                    pause_start = check_pts[1]
                elif 'resume' in check_pts[0]:
                    pause_time += check_pts[1] - pause_start
                    pause_start = 0
#print(movement_dict)
```

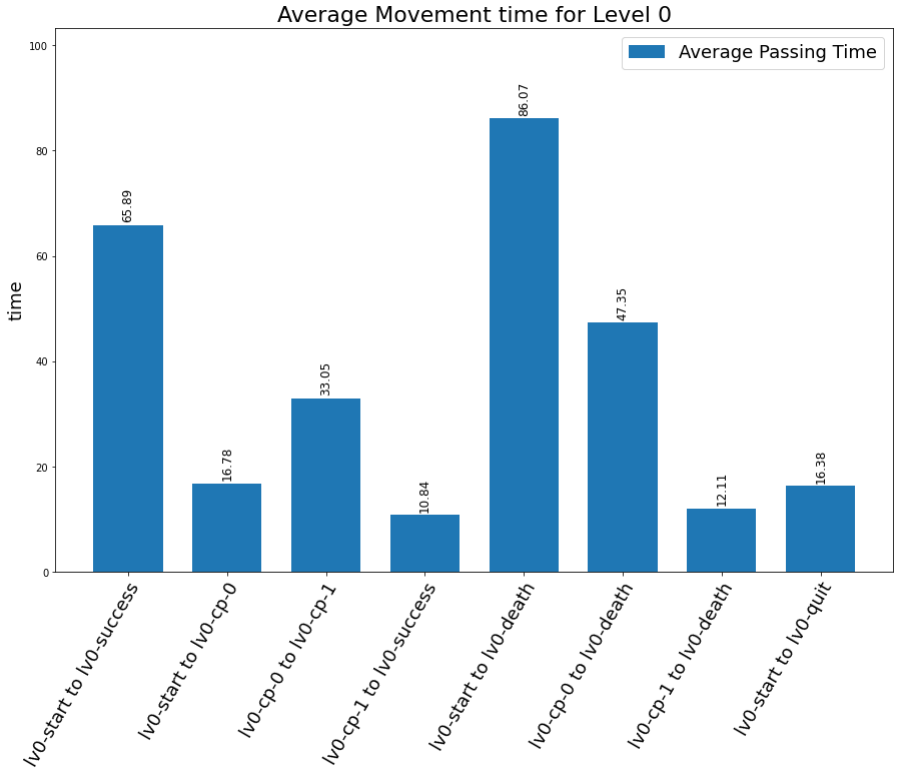
In [235…

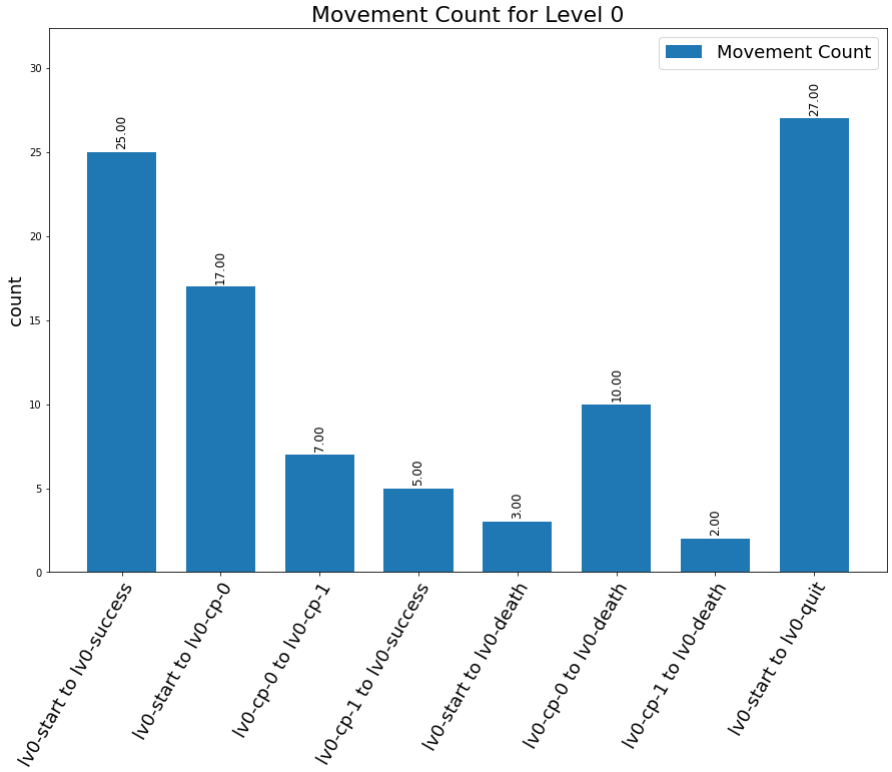
```
level_movement_label = []
level_movement_time_avg = []
level_movement_count = []

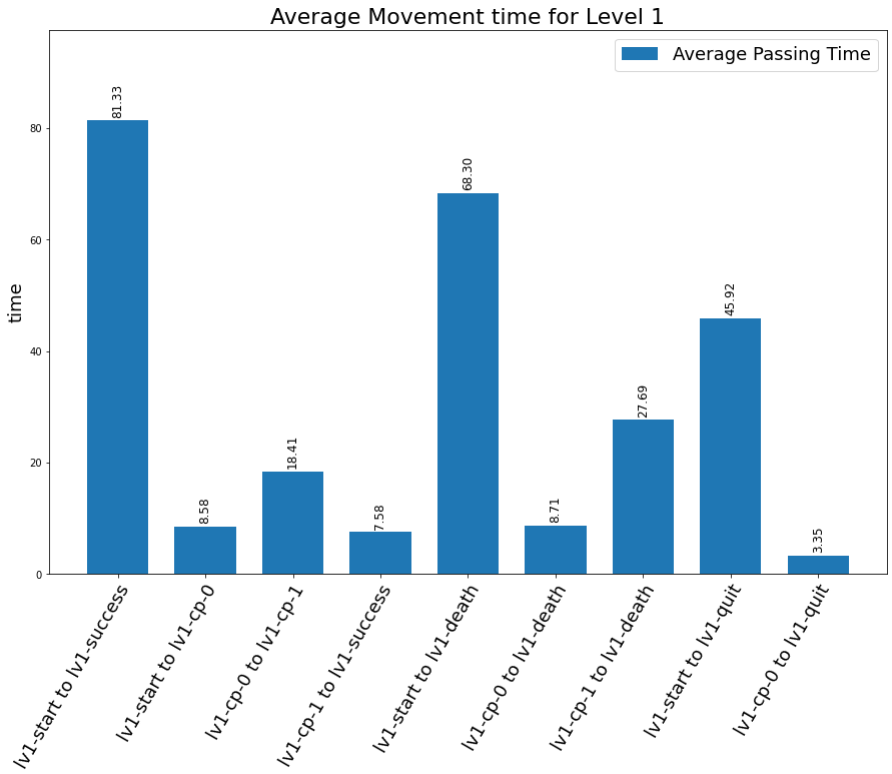

for i in range(5):
    level_movement_label.append([])
    level_movement_time_avg.append([])
    level_movement_count.append([])
```

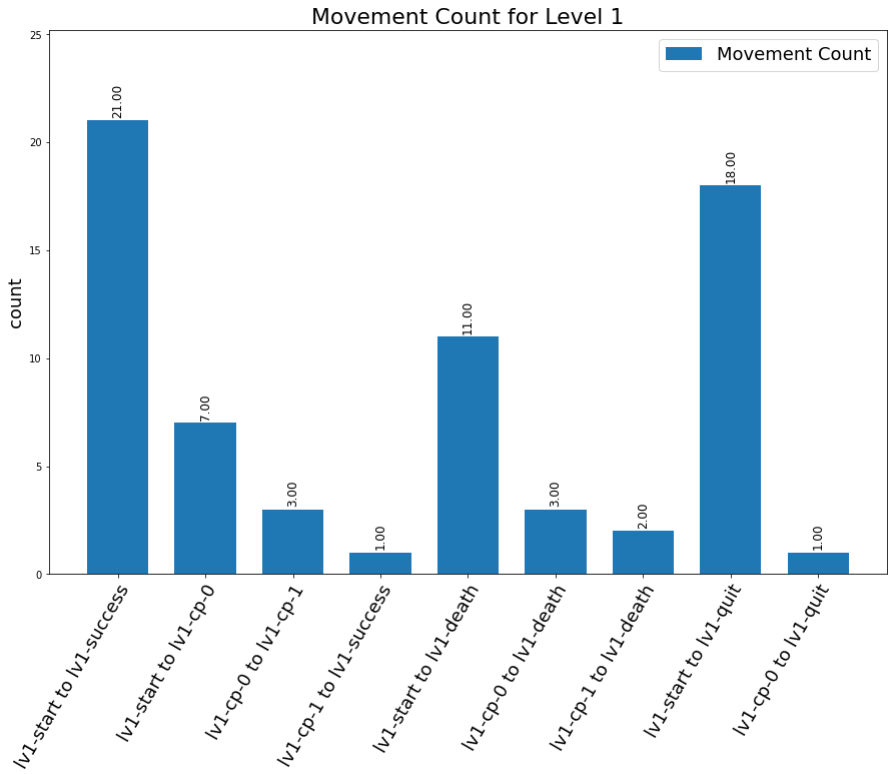
```
    for movement, time_list in movement_dict[i].items():
        time_sum = 0
        for time in time_list:
            time_sum += time
        level_movement_label[i].append(movement[0] + ' to ' + movement[1])
        level_movement_time_avg[i].append(time_sum / len(time_list) / 10000)
        level_movement_count[i].append(len(time_list))

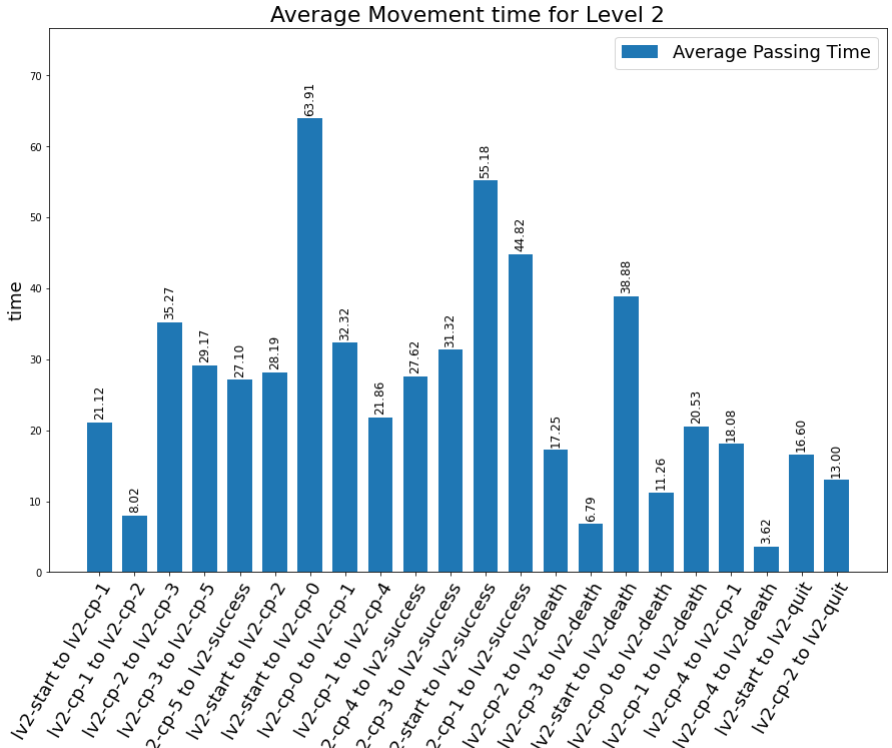
for i in range(5):
    game_stat_painter(level_movement_label[i], ['Average Passing Time'],
                      [[number] for number in level_movement_time_avg[i]], 'Average Movement time for Level ' + str(i), 'time', x_rotation= 60, label_format= '%.2f')
    game_stat_painter(level_movement_label[i], ['Movement Count'],
                      [[number] for number in level_movement_count[i]], 'Movement Count for Level ' + str(i), 'count', x_rotation= 60, label_format= '%.2f')
```

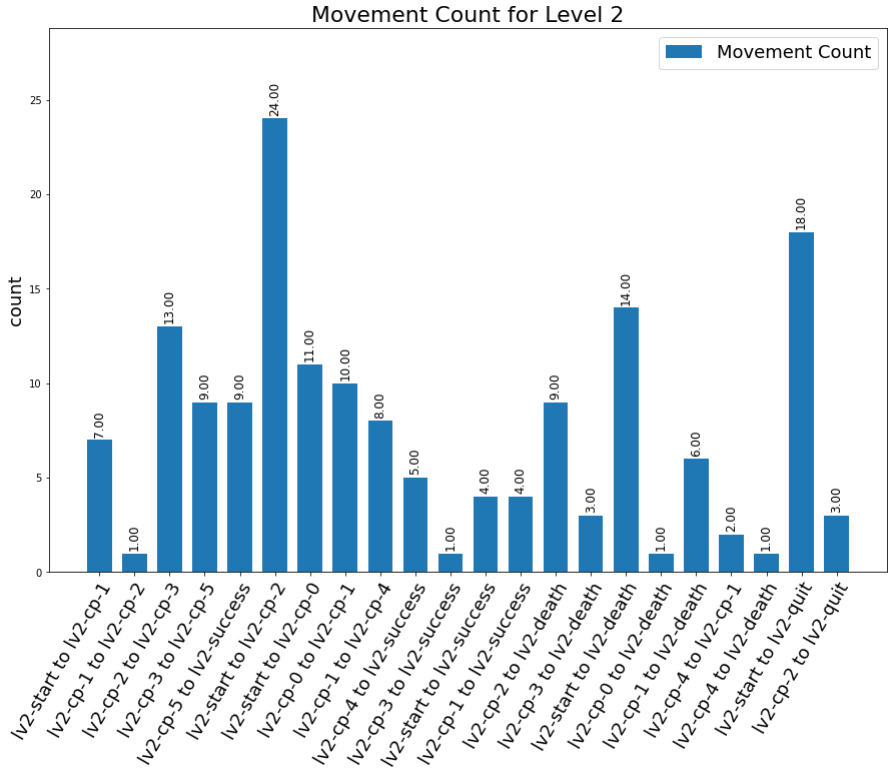


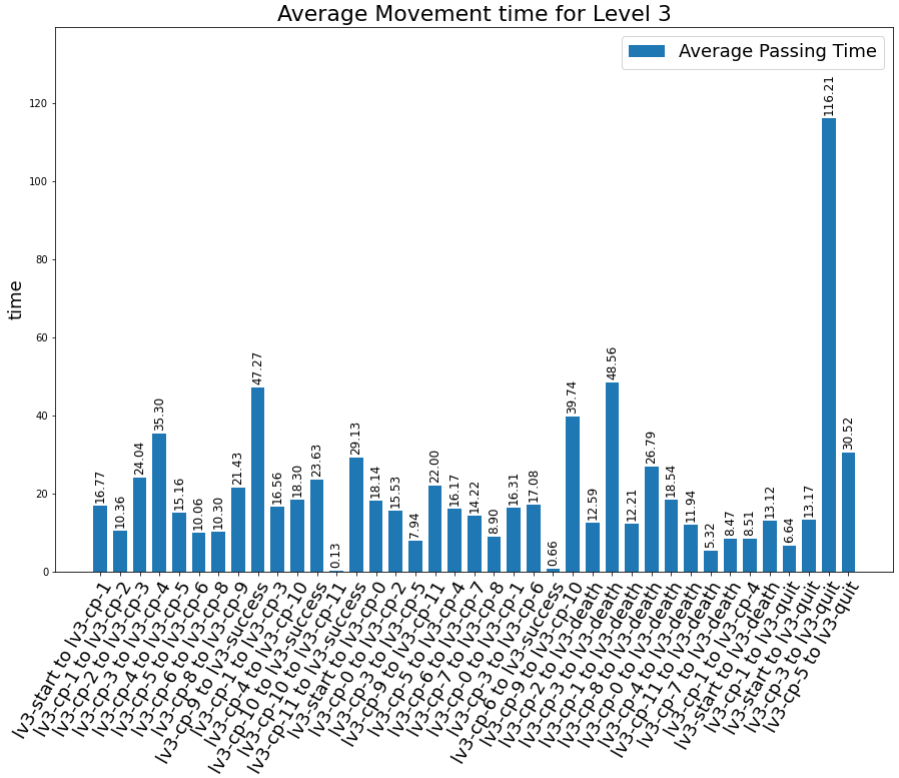

Movement Count for Level 0
Movement Count
count
0
5
10
15
20
25
30
25.00
17.00
7.00
5.00
3.00
10.00
2.00
27.00
lv0-start to lv0-success
lv0-start to lv0-cp-0
lv0-cp-0 to lv0-cp-1
lv0-cp-1 to lv0-success
lv0-start to lv0-death
lv0-cp-0 to lv0-death
lv0-cp-1 to lv0-death
lv0-start to lv0-quit

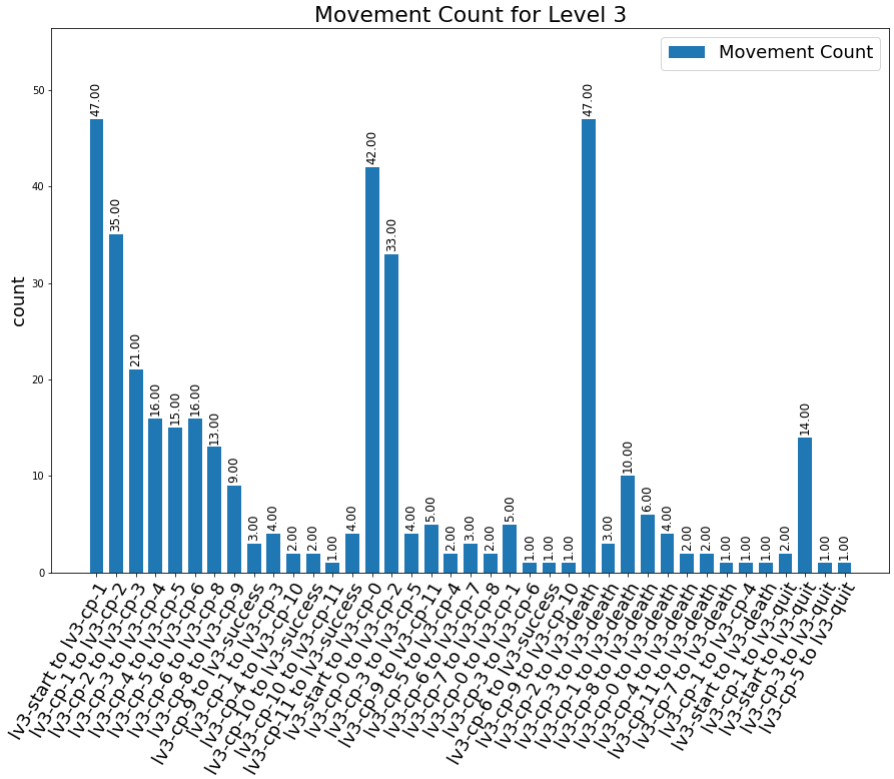

Average Movement time for Level 1
Average Passing Time
time
0
20
40
60
80
81.33
8.58
18.41
7.58
68.30
8.71
27.69
45.92
3.35
lv1-start to lv1-success
lv1-start to lv1-cp-0
lv1-cp-0 to lv1-cp-1
lv1-cp-1 to lv1-success
lv1-start to lv1-death
lv1-cp-0 to lv1-death
lv1-cp-1 to lv1-death
lv1-start to lv1-quit
lv1-cp-0 to lv1-quit

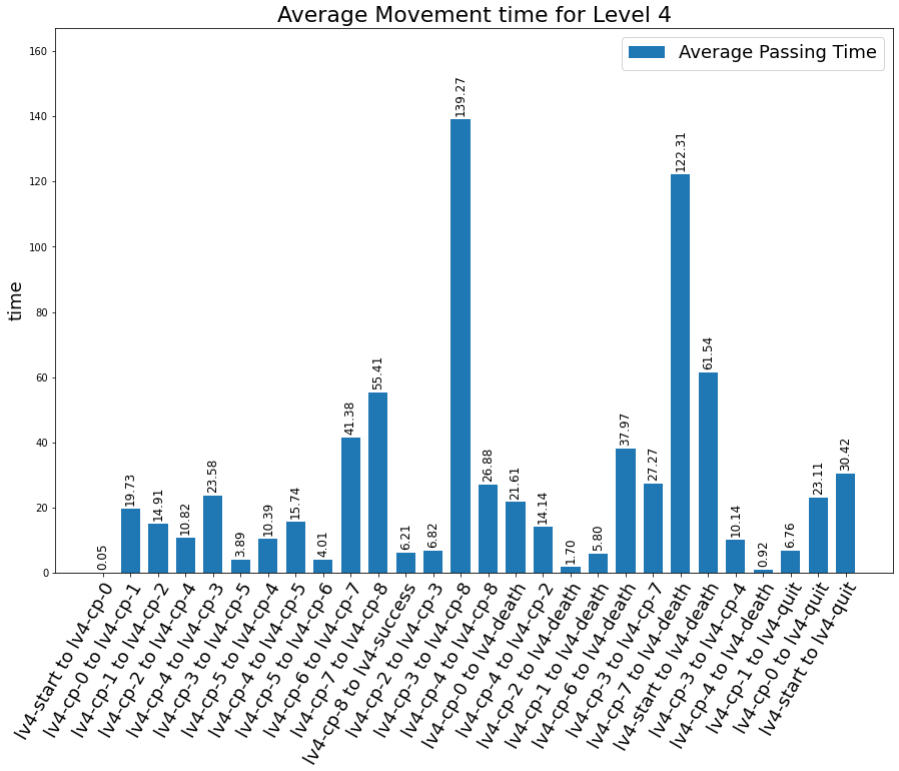

Movement Count for Level 1
Movement Count
count
0
5
10
15
20
25
21.00
7.00
3.00
1.00
11.00
3.00
2.00
18.00
1.00
lv1-start to lv1-success
lv1-start to lv1-cp-0
lv1-cp-0 to lv1-cp-1
lv1-cp-1 to lv1-success
lv1-start to lv1-death
lv1-cp-0 to lv1-death
lv1-cp-1 to lv1-death
lv1-start to lv1-quit
lv1-cp-0 to lv1-quit

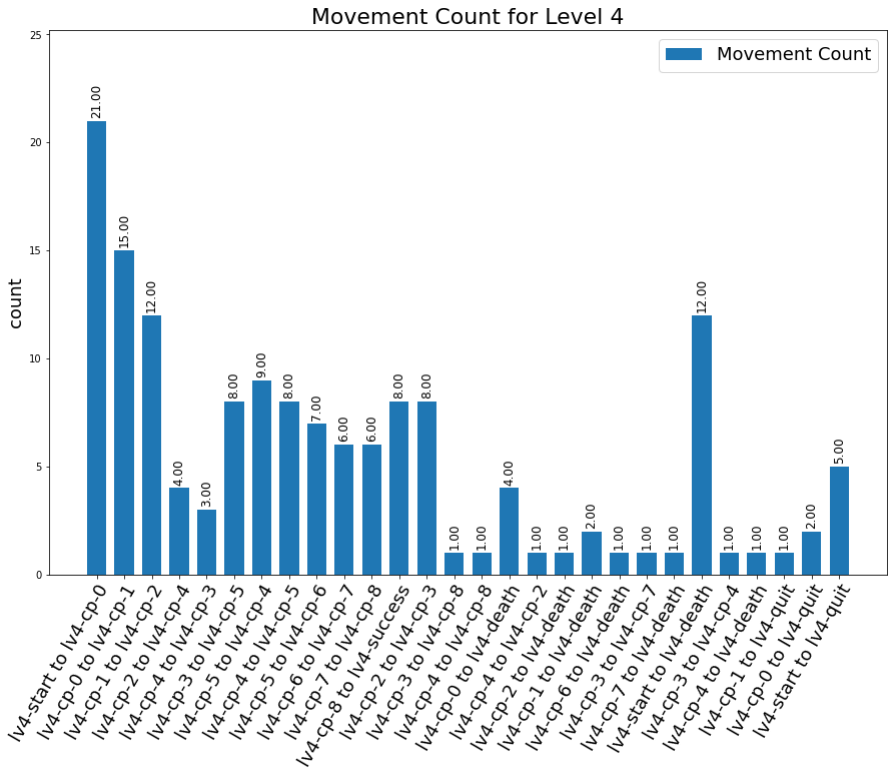

Average Movement time for Level 2
Average Passing Time
time
0
10
20
30
40
50
60
70
21.12
8.02
35.27
29.17
27.10
28.19
63.91
32.32
21.86
27.62
31.32
55.18
44.82
17.25
6.79
38.88
11.26
20.53
18.08
3.62
16.60
13.00
lv2-start to lv2-cp-1
lv2-cp-1 to lv2-cp-2
lv2-cp-2 to lv2-cp-3
lv2-cp-3 to lv2-cp-5
lv2-cp-5 to lv2-success
lv2-start to lv2-cp-2
lv2-start to lv2-cp-0
lv2-cp-0 to lv2-cp-1
lv2-cp-1 to lv2-cp-4
lv2-cp-4 to lv2-success
lv2-cp-3 to lv2-success
lv2-start to lv2-success
lv2-cp-1 to lv2-success
lv2-cp-2 to lv2-death
lv2-cp-3 to lv2-death
lv2-start to lv2-death
lv2-cp-0 to lv2-death
lv2-cp-1 to lv2-death
lv2-cp-4 to lv2-cp-1
lv2-cp-4 to lv2-death
lv2-start to lv2-quit
lv2-cp-2 to lv2-quit


Movement Count for Level 2
Movement Count
count
0
5
10
15
20
25
7.00
1.00
13.00
9.00
9.00
24.00
11.00
10.00
8.00
5.00
1.00
4.00
4.00
9.00
3.00
14.00
1.00
6.00
2.00
1.00
18.00
3.00
lv2-start to lv2-cp-1
lv2-cp-1 to lv2-cp-2
lv2-cp-2 to lv2-cp-3
lv2-cp-3 to lv2-cp-5
lv2-cp-5 to lv2-success
lv2-start to lv2-cp-2
lv2-start to lv2-cp-0
lv2-cp-0 to lv2-cp-1
lv2-cp-1 to lv2-cp-4
lv2-cp-4 to lv2-success
lv2-cp-3 to lv2-success
lv2-start to lv2-success
lv2-cp-1 to lv2-success
lv2-cp-2 to lv2-death
lv2-cp-3 to lv2-death
lv2-start to lv2-death
lv2-cp-0 to lv2-death
lv2-cp-1 to lv2-death
lv2-cp-4 to lv2-cp-1
lv2-cp-4 to lv2-death
lv2-start to lv2-quit
lv2-cp-2 to lv2-quit


Average Movement time for Level 3
Average Passing Time
time
0
20
40
60
80
100
120
16.77
10.36
24.04
35.30
15.16
10.06
10.30
21.43
47.27
16.56
18.30
23.63
0.13
29.13
18.14
15.53
7.94
22.00
16.17
14.22
8.90
16.31
17.08
0.66
39.74
12.59
48.56
12.21
26.79
18.54
11.94
5.32
8.47
8.51
13.12
6.64
13.17
116.21
30.52
lv3-start to lv3-cp-1
lv3-cp-1 to lv3-cp-2
lv3-cp-2 to lv3-cp-3
lv3-cp-3 to lv3-cp-4
lv3-cp-4 to lv3-cp-5
lv3-cp-5 to lv3-cp-6
lv3-cp-6 to lv3-cp-8
lv3-cp-8 to lv3-cp-9
lv3-cp-9 to lv3-success
lv3-cp-1 to lv3-cp-3
lv3-cp-4 to lv3-cp-10
lv3-cp-10 to lv3-success
lv3-cp-11 to lv3-success
lv3-start to lv3-cp-11
lv3-cp-0 to lv3-cp-0
lv3-cp-3 to lv3-cp-2
lv3-cp-9 to lv3-cp-5
lv3-cp-5 to lv3-cp-11
lv3-cp-6 to lv3-cp-4
lv3-cp-7 to lv3-cp-7
lv3-cp-0 to lv3-cp-8
lv3-cp-3 to lv3-cp-1
lv3-cp-6 to lv3-cp-6
lv3-cp-9 to lv3-success
lv3-cp-2 to lv3-cp-10
lv3-cp-3 to lv3-death
lv3-cp-1 to lv3-death
lv3-cp-8 to lv3-death
lv3-cp-0 to lv3-death
lv3-cp-4 to lv3-death
lv3-cp-11 to lv3-death
lv3-cp-7 to lv3-death
lv3-cp-1 to lv3-death
lv3-start to lv3-cp-4
lv3-cp-1 to lv3-death
lv3-start to lv3-quit
lv3-cp-3 to lv3-quit
lv3-cp-5 to lv3-quit


Movement Count for Level 3
Movement Count
count
0
10
20
30
40
50
47.00
35.00
21.00
16.00
15.00
16.00
13.00
9.00
3.00
4.00
2.00
2.00
1.00
4.00
42.00
33.00
4.00
5.00
2.00
3.00
2.00
5.00
1.00
1.00
1.00
47.00
3.00
10.00
6.00
4.00
2.00
2.00
1.00
1.00
1.00
2.00
14.00
1.00
1.00
lv3-start to lv3-cp-1
lv3-cp-1 to lv3-cp-2
lv3-cp-2 to lv3-cp-3
lv3-cp-3 to lv3-cp-4
lv3-cp-4 to lv3-cp-5
lv3-cp-5 to lv3-cp-6
lv3-cp-6 to lv3-cp-8
lv3-cp-8 to lv3-cp-9
lv3-cp-9 to lv3-success
lv3-cp-1 to lv3-cp-3
lv3-cp-4 to lv3-cp-10
lv3-cp-10 to lv3-success
lv3-cp-11 to lv3-success
lv3-start to lv3-cp-11
lv3-cp-0 to lv3-cp-0
lv3-cp-3 to lv3-cp-2
lv3-cp-9 to lv3-cp-5
lv3-cp-5 to lv3-cp-11
lv3-cp-6 to lv3-cp-4
lv3-cp-7 to lv3-cp-7
lv3-cp-0 to lv3-cp-8
lv3-cp-3 to lv3-cp-1
lv3-cp-8 to lv3-cp-6
lv3-cp-9 to lv3-success
lv3-cp-2 to lv3-cp-10
lv3-cp-3 to lv3-death
lv3-cp-1 to lv3-death
lv3-cp-8 to lv3-death
lv3-cp-0 to lv3-death
lv3-cp-4 to lv3-death
lv3-cp-11 to lv3-death
lv3-cp-7 to lv3-death
lv3-cp-1 to lv3-death
lv3-start to lv3-cp-4
lv3-cp-1 to lv3-death
lv3-start to lv3-quit
lv3-cp-3 to lv3-quit
lv3-cp-5 to lv3-quit


Average Movement time for Level 4
Average Passing Time
time
0
20
40
60
80
100
120
140
160
0.05
19.73
14.91
10.82
23.58
3.89
10.39
15.74
4.01
41.38
55.41
6.21
6.82
139.27
26.88
21.61
14.14
1.70
5.80
37.97
27.27
122.31
61.54
10.14
0.92
6.76
23.11
30.42
lv4-start to lv4-cp-0
lv4-cp-0 to lv4-cp-1
lv4-cp-1 to lv4-cp-2
lv4-cp-2 to lv4-cp-4
lv4-cp-4 to lv4-cp-3
lv4-cp-3 to lv4-cp-5
lv4-cp-5 to lv4-cp-4
lv4-cp-4 to lv4-cp-5
lv4-cp-5 to lv4-cp-6
lv4-cp-6 to lv4-cp-7
lv4-cp-7 to lv4-cp-8
lv4-cp-8 to lv4-success
lv4-cp-2 to lv4-cp-3
lv4-cp-3 to lv4-cp-8
lv4-cp-4 to lv4-cp-8
lv4-cp-0 to lv4-cp-8
lv4-cp-4 to lv4-death
lv4-cp-2 to lv4-cp-2
lv4-cp-1 to lv4-death
lv4-cp-6 to lv4-death
lv4-cp-3 to lv4-death
lv4-cp-7 to lv4-cp-7
lv4-start to lv4-death
lv4-cp-3 to lv4-death
lv4-cp-4 to lv4-cp-4
lv4-cp-4 to lv4-death
lv4-cp-1 to lv4-quit
lv4-cp-0 to lv4-quit
lv4-start to lv4-quit


Movement Count for Level 4
Movement Count
count
0
5
10
15
20
25
21.00
15.00
12.00
4.00
3.00
8.00
9.00
8.00
7.00
6.00
6.00
8.00
8.00
1.00
1.00
4.00
1.00
1.00
2.00
1.00
1.00
1.00
12.00
1.00
1.00
1.00
2.00
5.00
lv4-start to lv4-cp-0
lv4-cp-0 to lv4-cp-1
lv4-cp-1 to lv4-cp-2
lv4-cp-2 to lv4-cp-4
lv4-cp-4 to lv4-cp-3
lv4-cp-3 to lv4-cp-5
lv4-cp-5 to lv4-cp-4
lv4-cp-4 to lv4-cp-5
lv4-cp-5 to lv4-cp-6
lv4-cp-6 to lv4-cp-7
lv4-cp-7 to lv4-cp-8
lv4-cp-8 to lv4-success
lv4-cp-2 to lv4-cp-3
lv4-cp-3 to lv4-cp-8
lv4-cp-4 to lv4-cp-8
lv4-cp-0 to lv4-death
lv4-cp-4 to lv4-cp-2
lv4-cp-2 to lv4-death
lv4-cp-1 to lv4-death
lv4-cp-6 to lv4-death
lv4-cp-3 to lv4-death
lv4-cp-7 to lv4-cp-7
lv4-start to lv4-death
lv4-cp-3 to lv4-death
lv4-cp-3 to lv4-cp-4
lv4-cp-4 to lv4-death
lv4-cp-1 to lv4-quit
lv4-cp-0 to lv4-quit
lv4-start to lv4-quit

In [ ]: