DatasetVisualization

April 25, 2020

In [4]:
```
import numpy as np
import json
import matplotlib.pyplot as plt
import matplotlib as mpl
import seaborn as sb
import os
from os import listdir
from os.path import isfile, join
from enum import Enum
%load_ext autoreload
%autoreload 2
from ExtractInfoFromGrid import show_single_training_example_visually, read_single_trai
#from ExtractInfoFromGrid import *
#from DatasetVisualization import *
```

```
The autoreload extension is already loaded. To reload it, use:
  %reload_ext autoreload
```

In [12]:
```
mypath = '../../ARC_Dataset/mini_training/OP_EQUAL_IP/NonColoredDataset'
onlyfiles_train = [join(mypath, f) for f in listdir(mypath) if isfile(join(mypath, f))
onlyfiles_train.sort()
print(f"Total files in mini training are {len(onlyfiles_train)}")

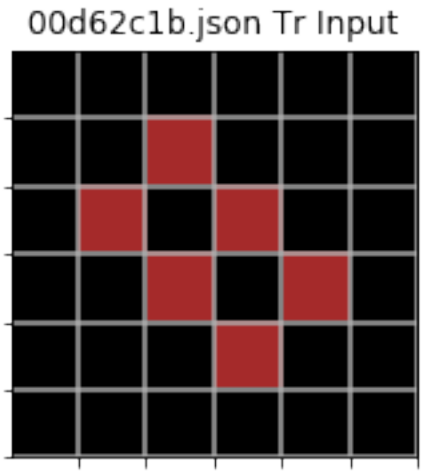
mypath = '../../ARC_Dataset/mini_testing/OP_EQUAL_IP/NonColoredDataset'
onlyfiles_test = [join(mypath, f) for f in listdir(mypath) if isfile(join(mypath, f))]
onlyfiles_test.sort()
print(f"Total files in mini testing are {len(onlyfiles_test)}")
```

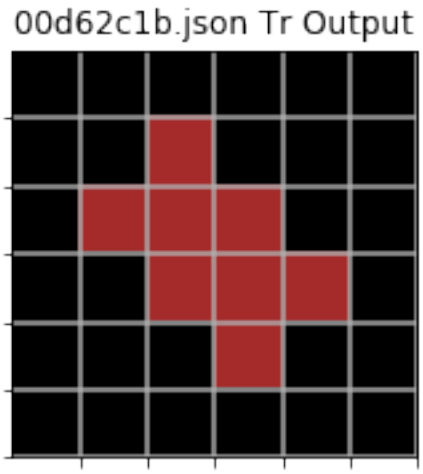
```
Total files in mini training are 59
Total files in mini testing are 43
```

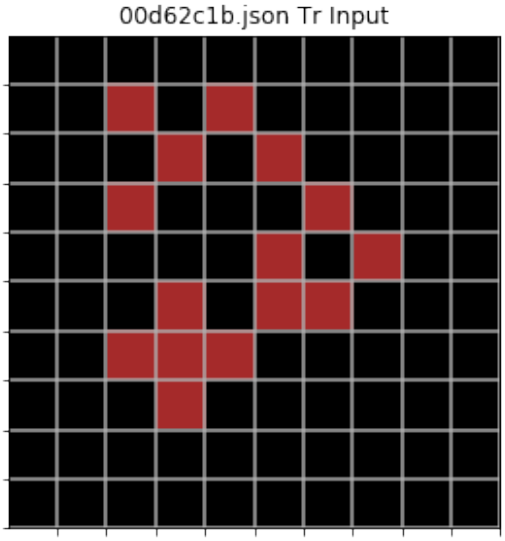
In [15]:
```
print('Visualizing files in mini training')
i = 0
for filename in onlyfiles_train:
    print(f'i = {i}')
    train_list, test_list = read_single_training_example(filename)
```

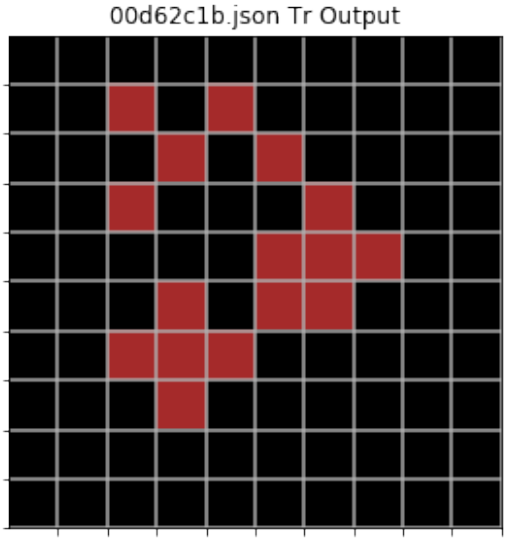
```
            show_single_training_example_visually(train_list, test_list, filename, removeColo
            i += 1

Visualizing files in mini training
i = 0
```

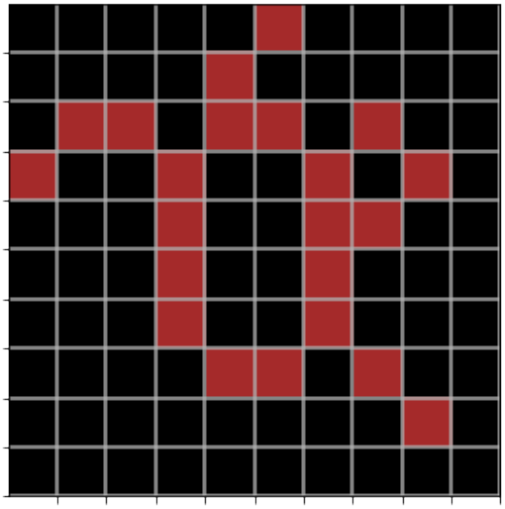








00d62c1b.json Tr Input



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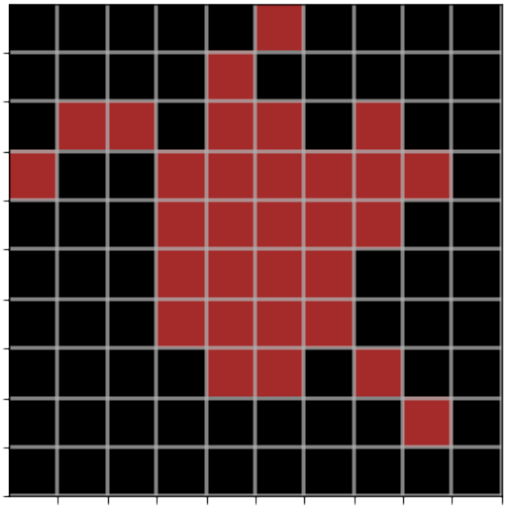

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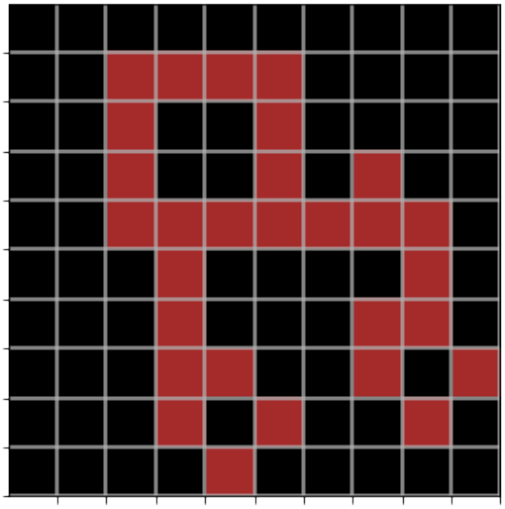

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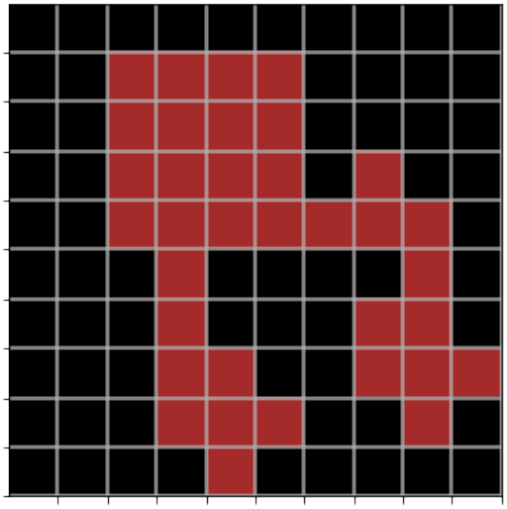

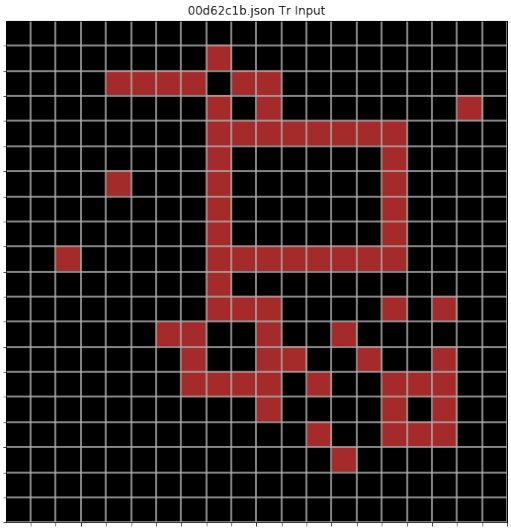
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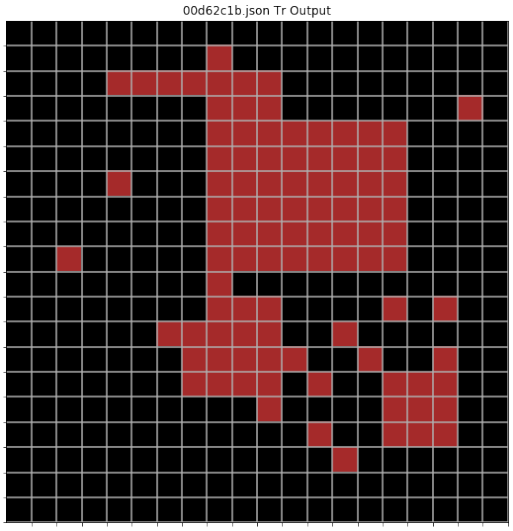
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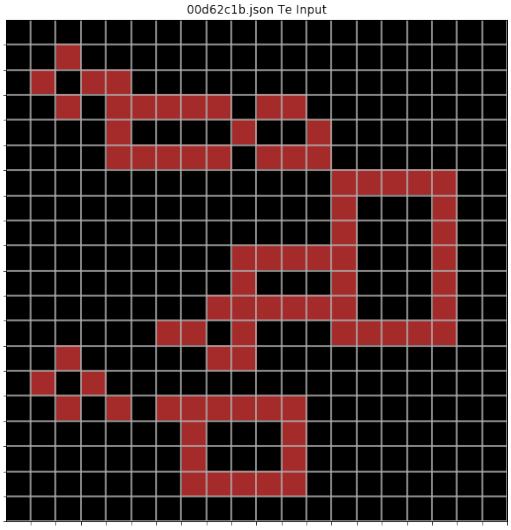
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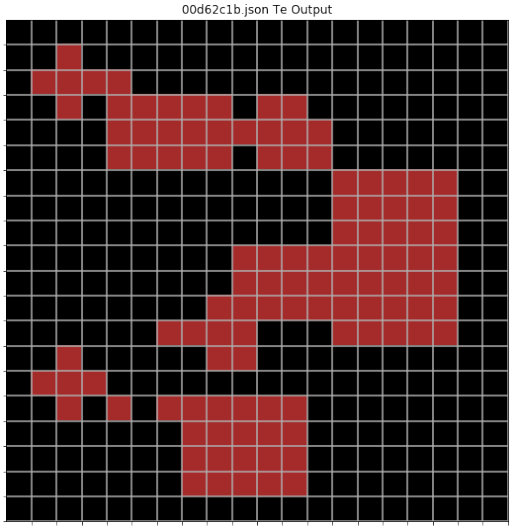
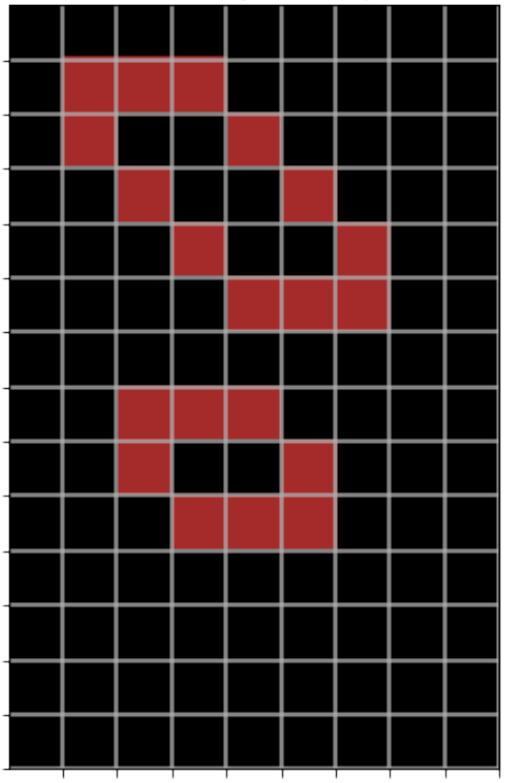

00d62c1b.json Te Output

```
i = 1
```

025d127b.json Tr Input



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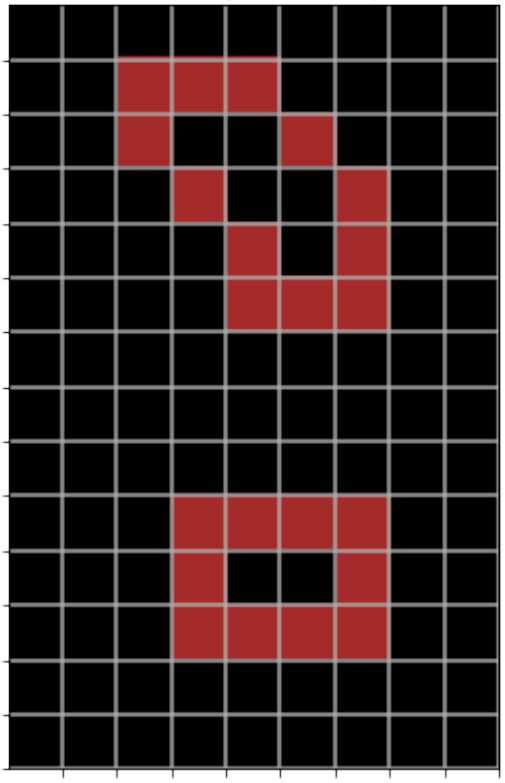

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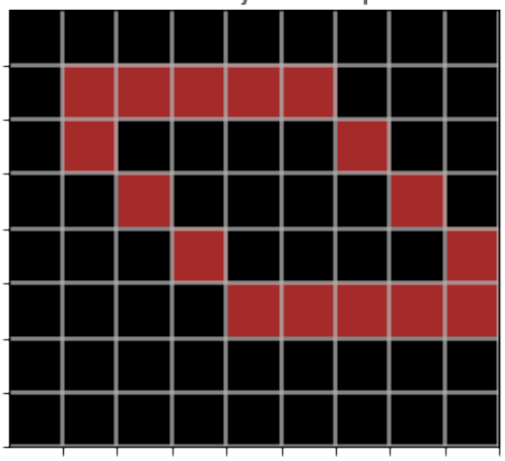

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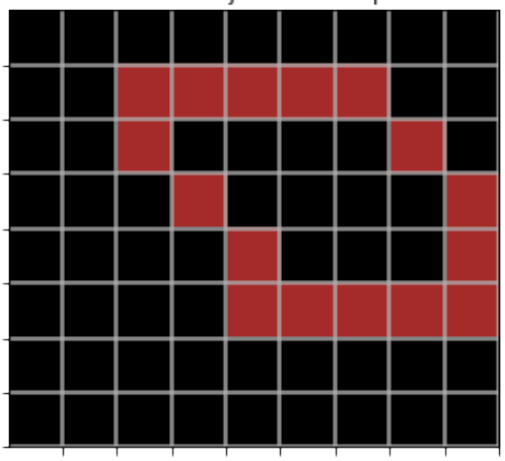

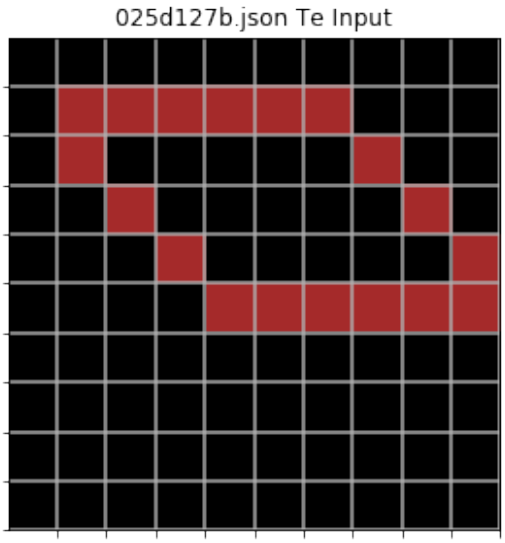
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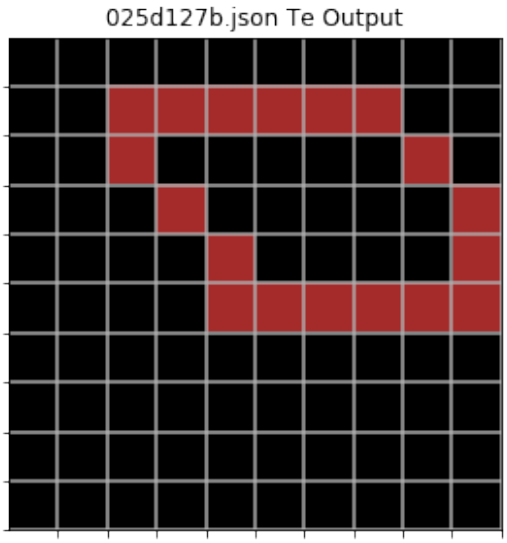
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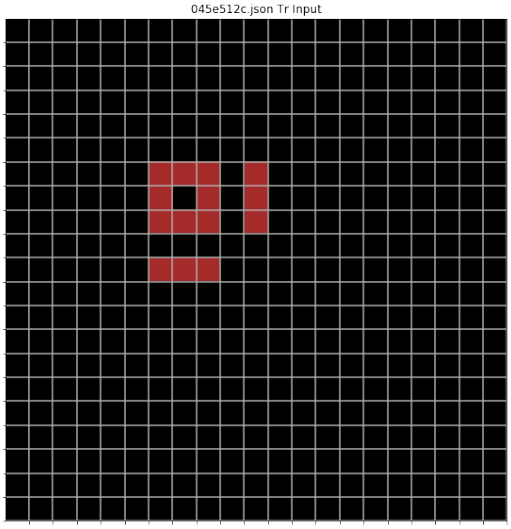
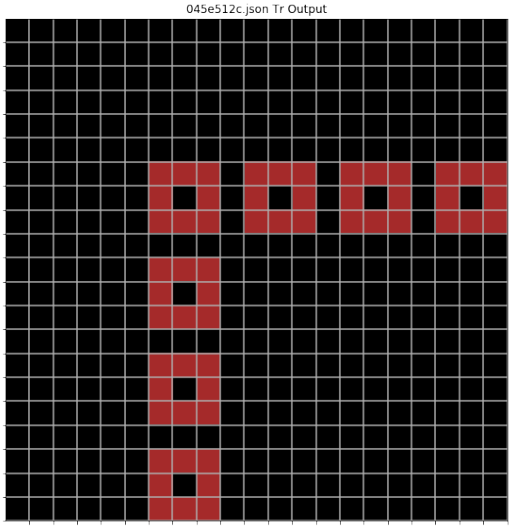
i = 2


045e512c.json Tr Input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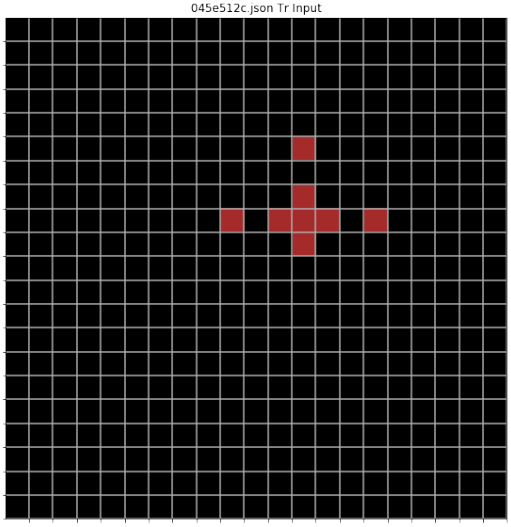

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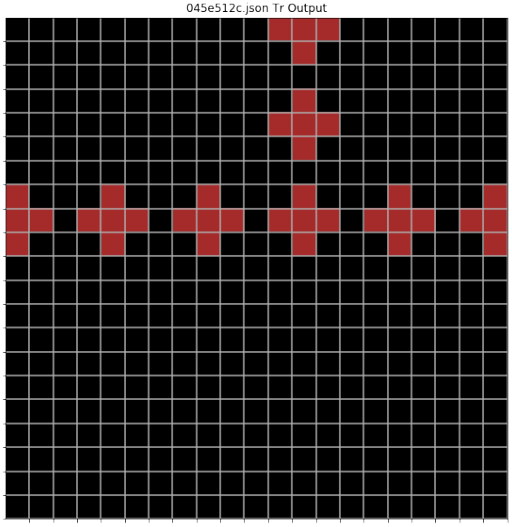

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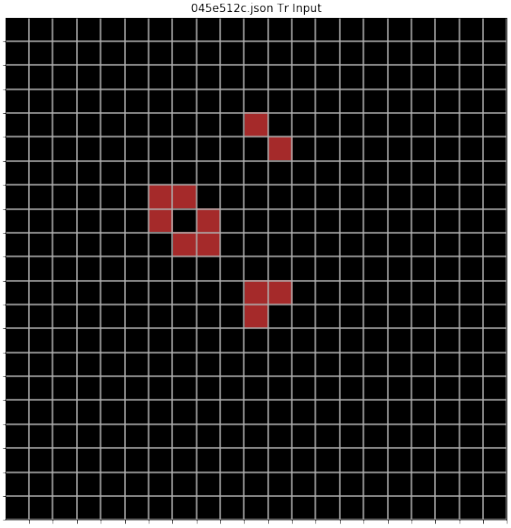

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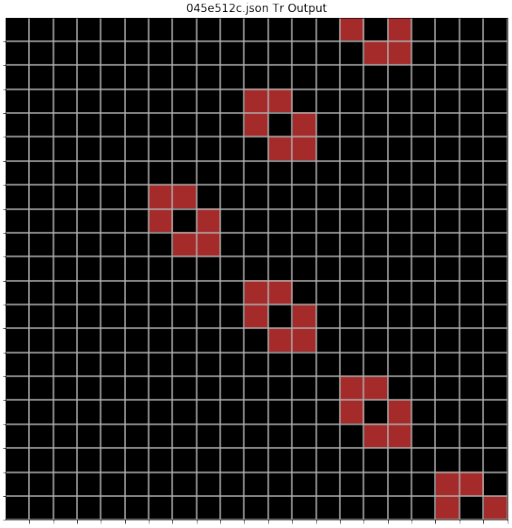

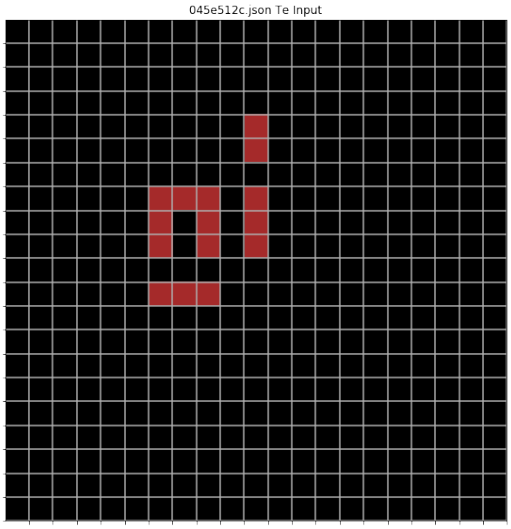
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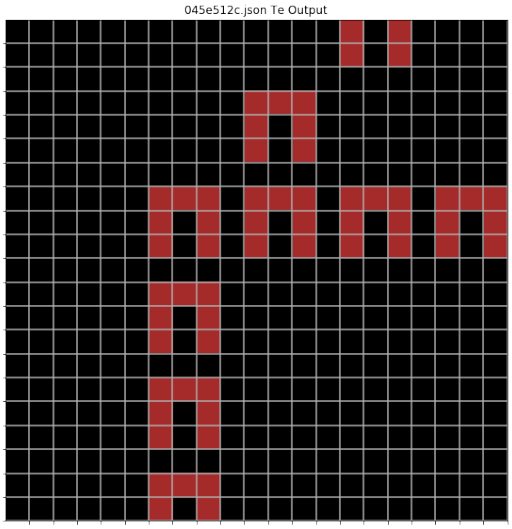
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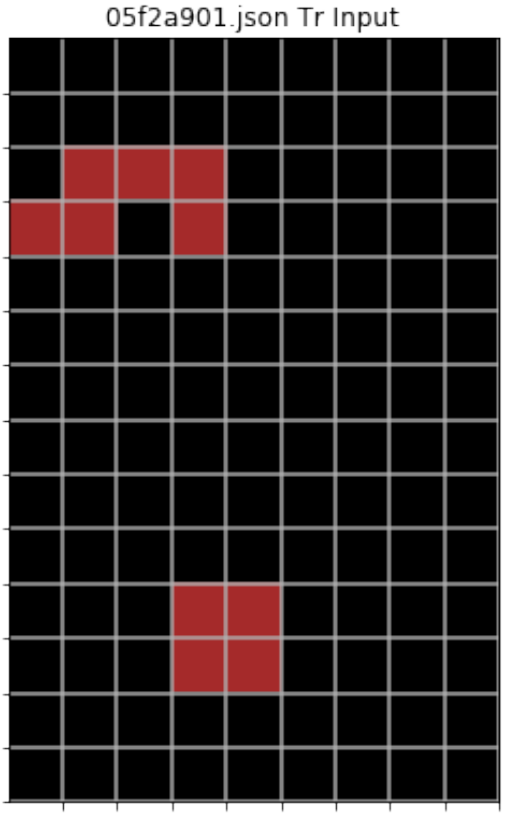
```
i = 3
```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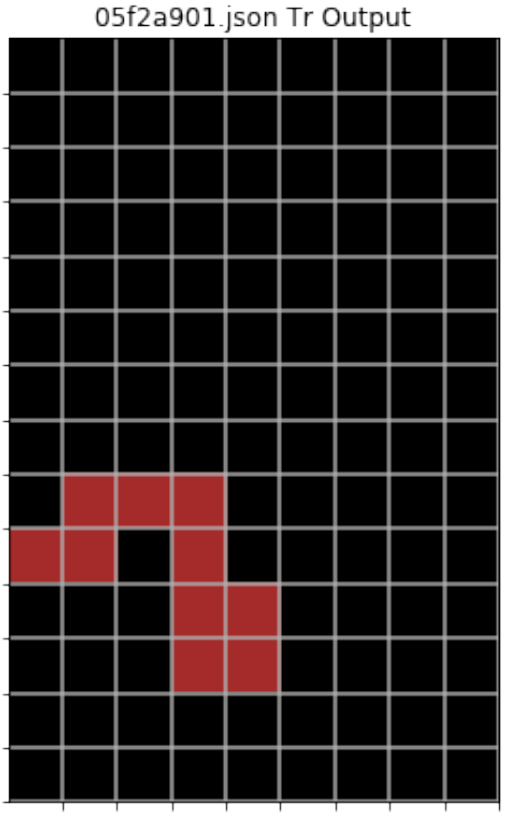
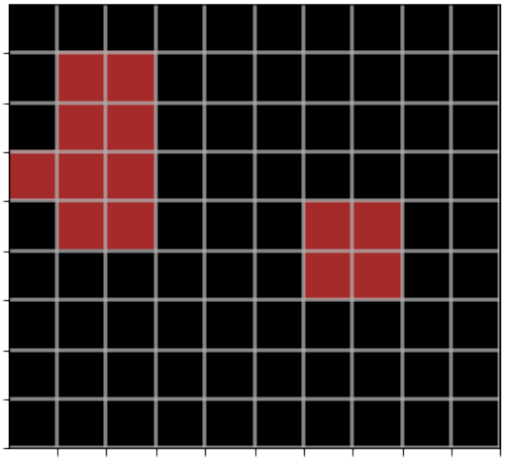
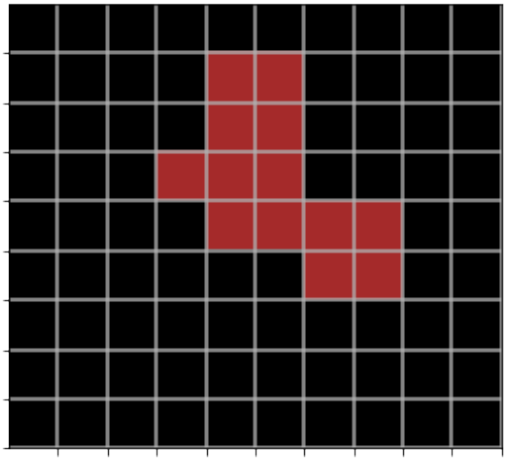

05f2a901.json Tr Output

05f2a901.json Tr Input



05f2a901.json Tr Output



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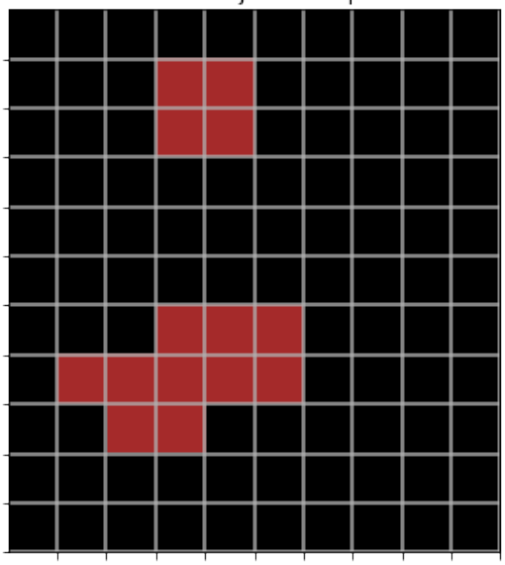

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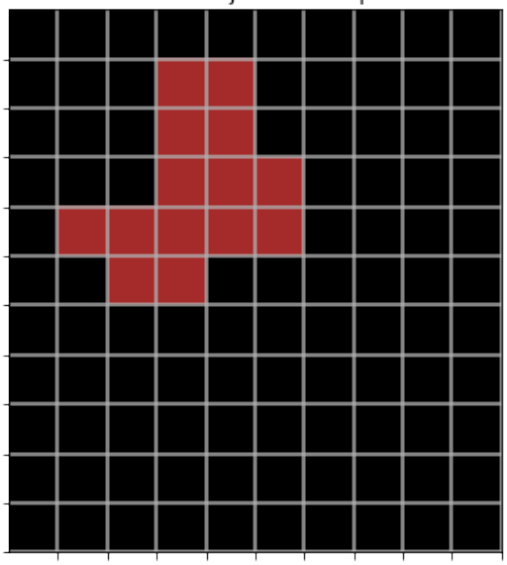

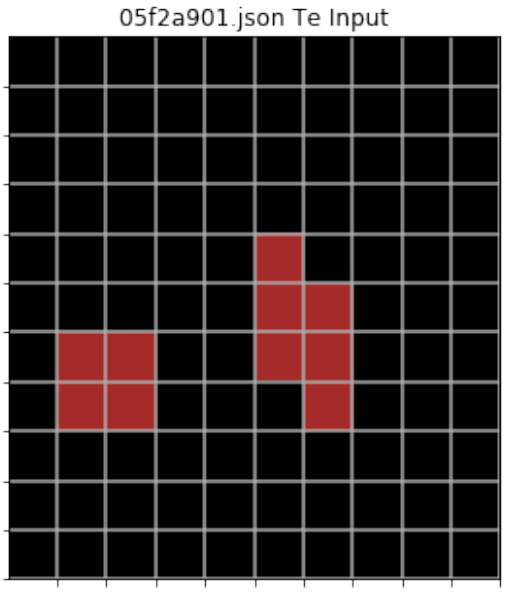
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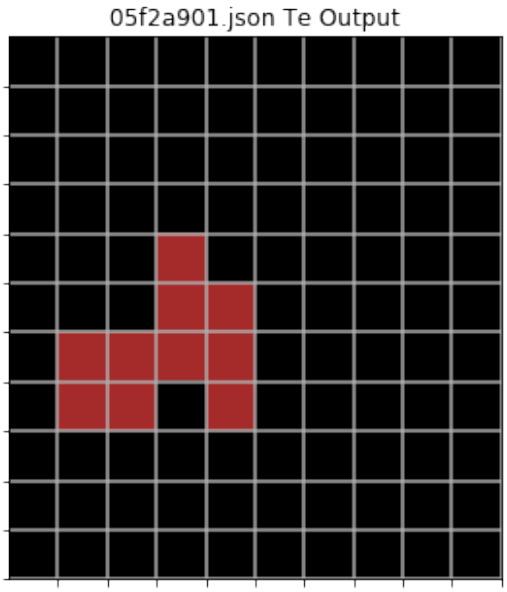
05f2a901.json Te Output

```
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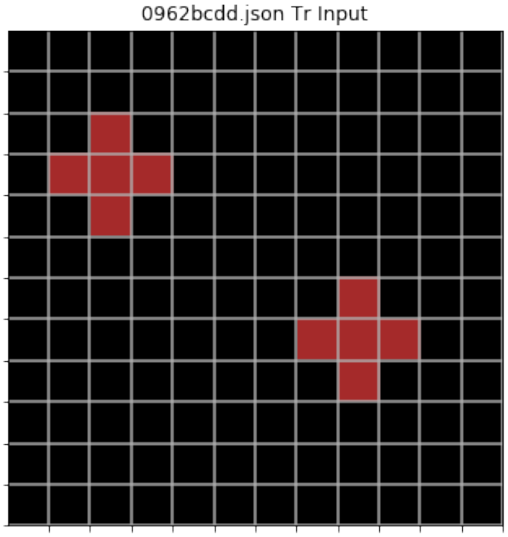
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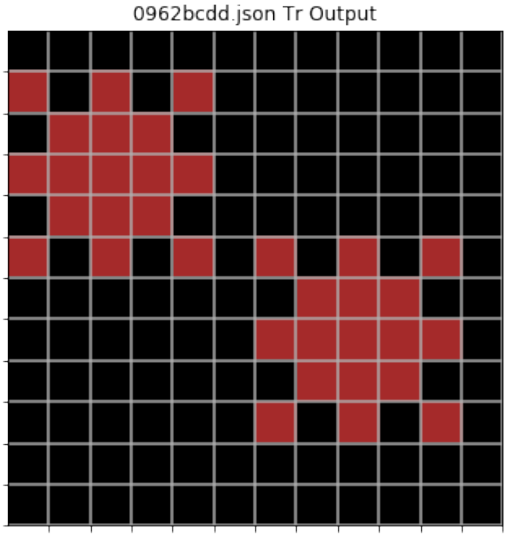
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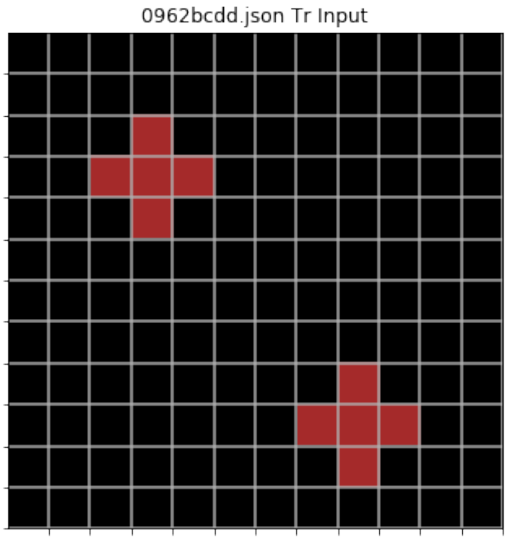
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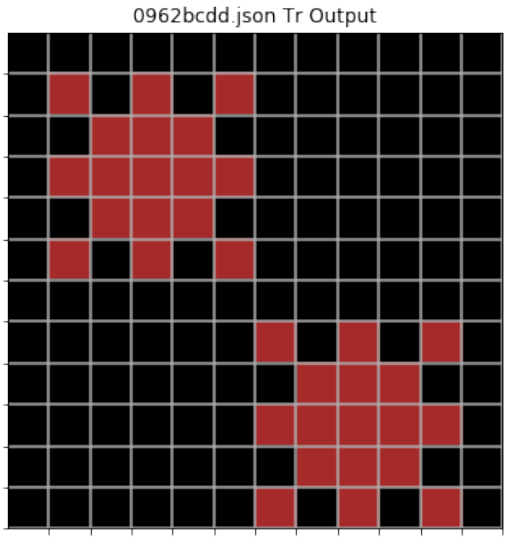
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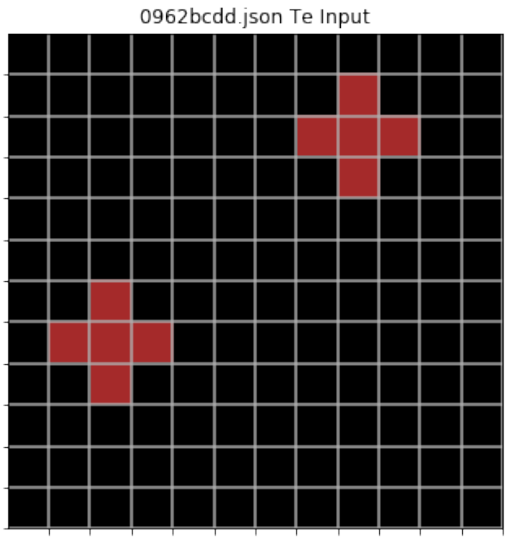
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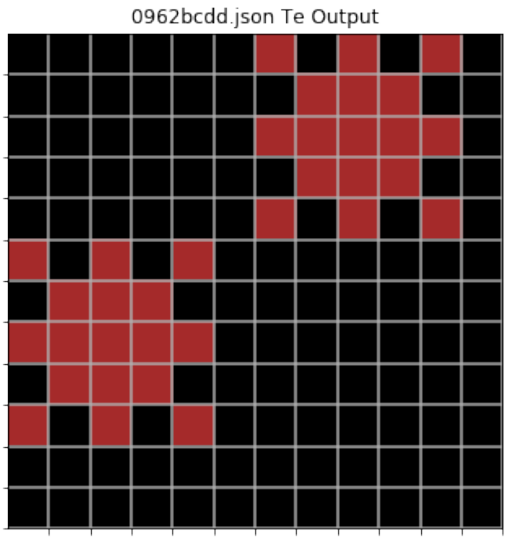
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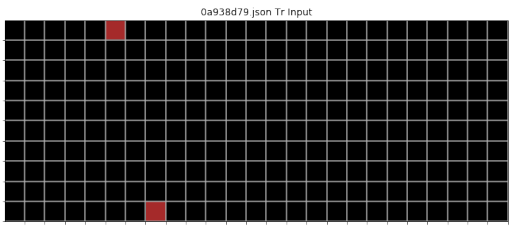
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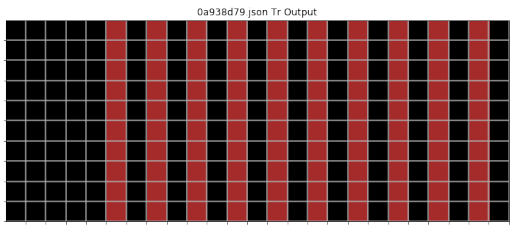
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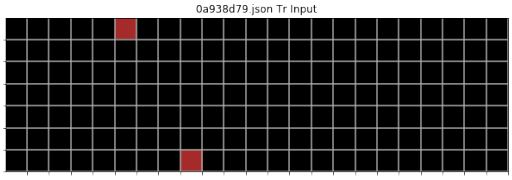
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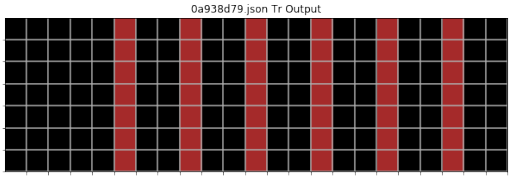
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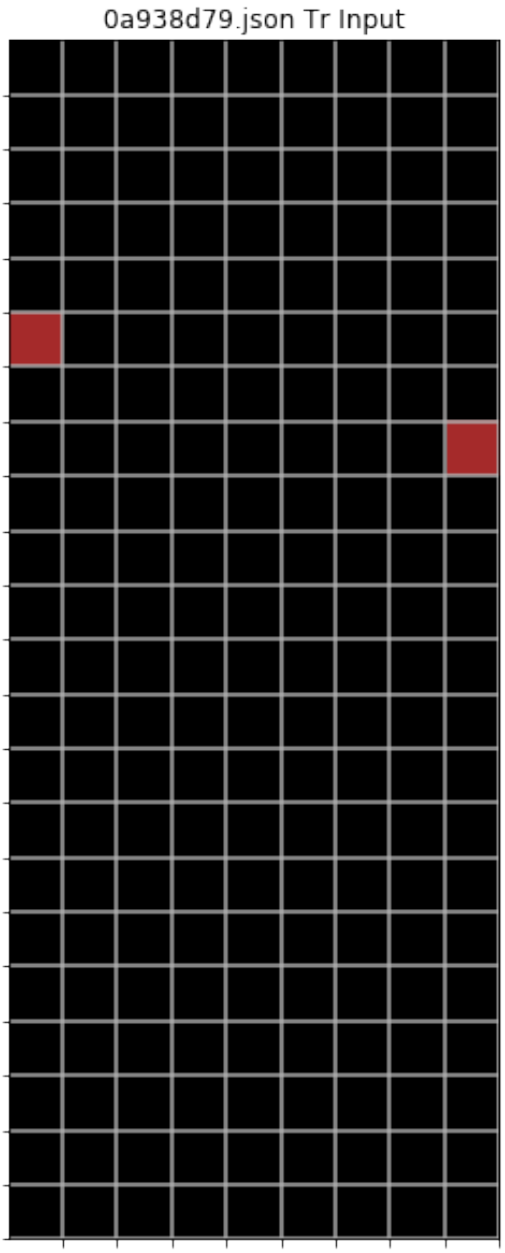
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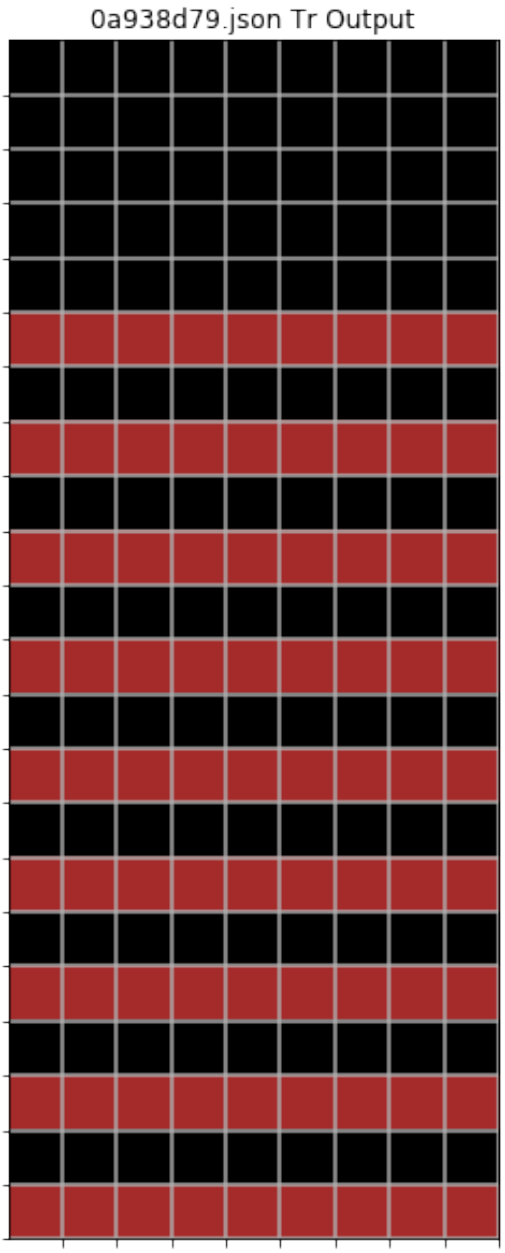
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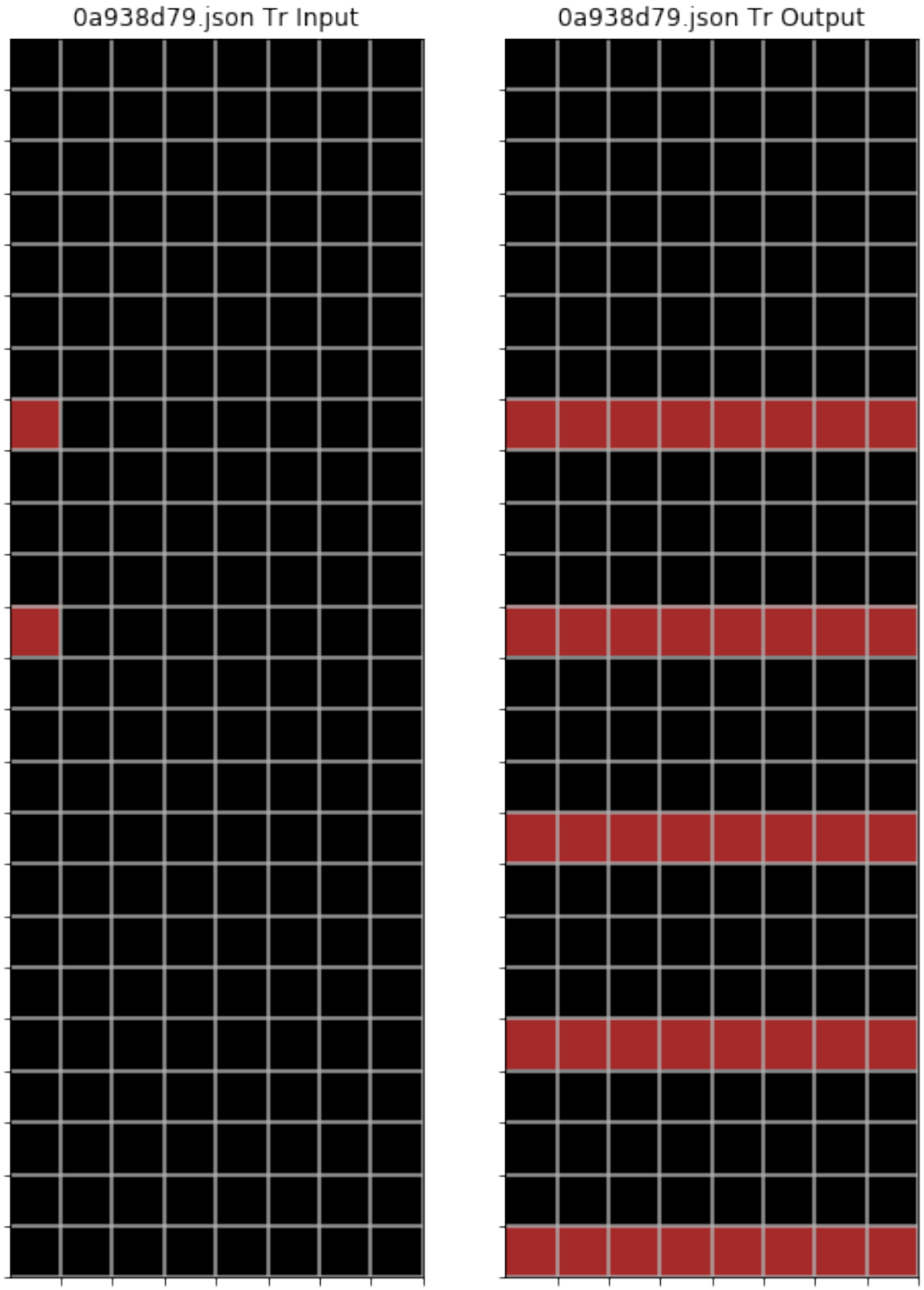
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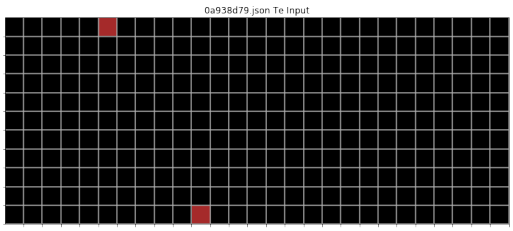
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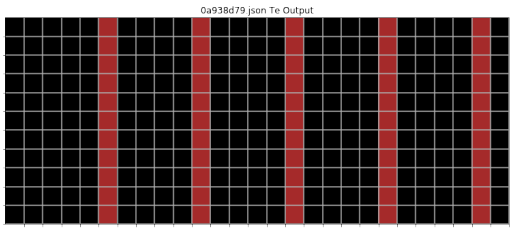
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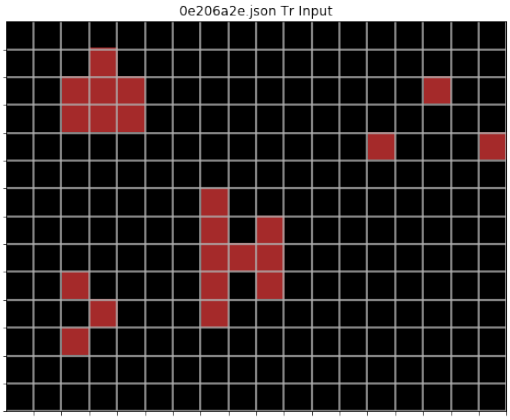
i = 6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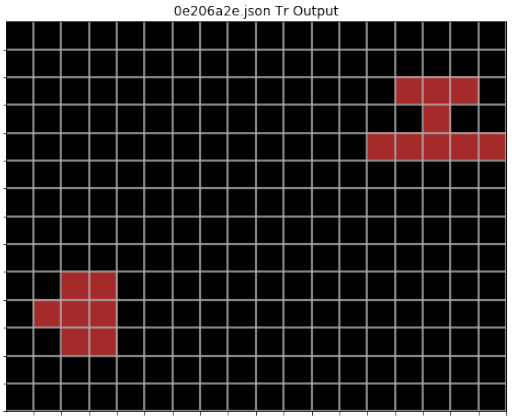
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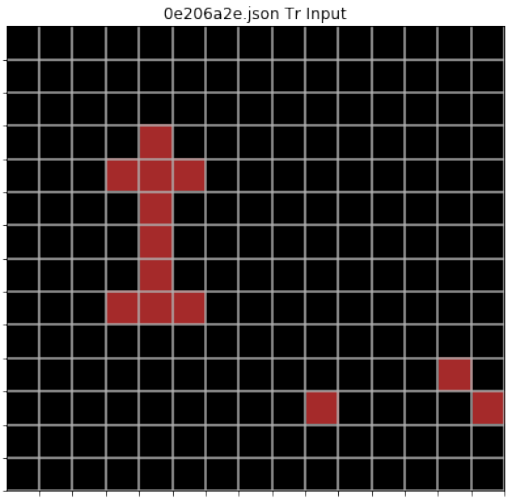
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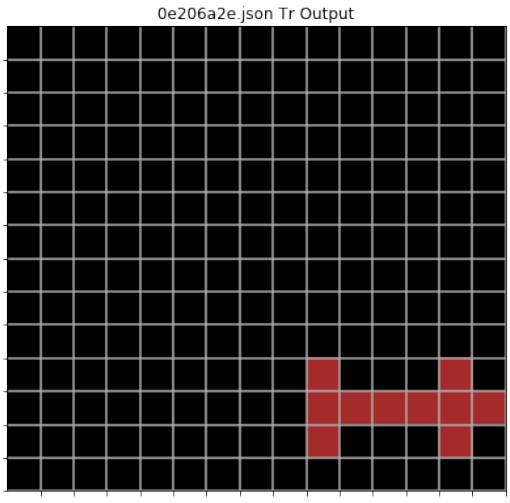
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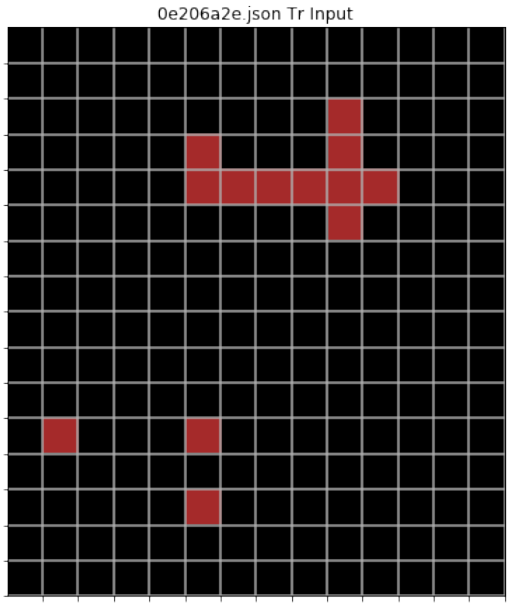
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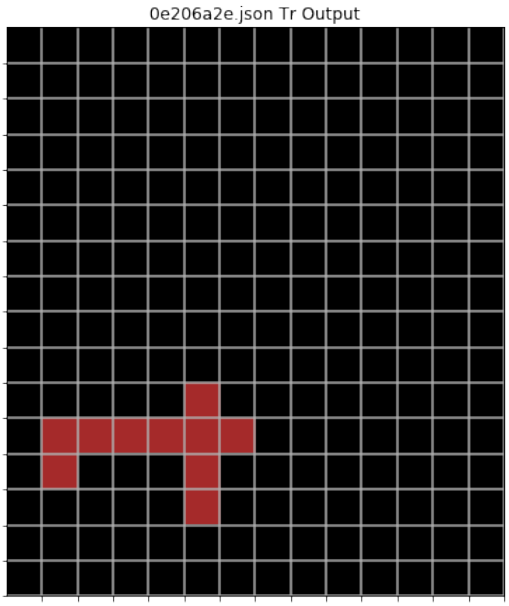
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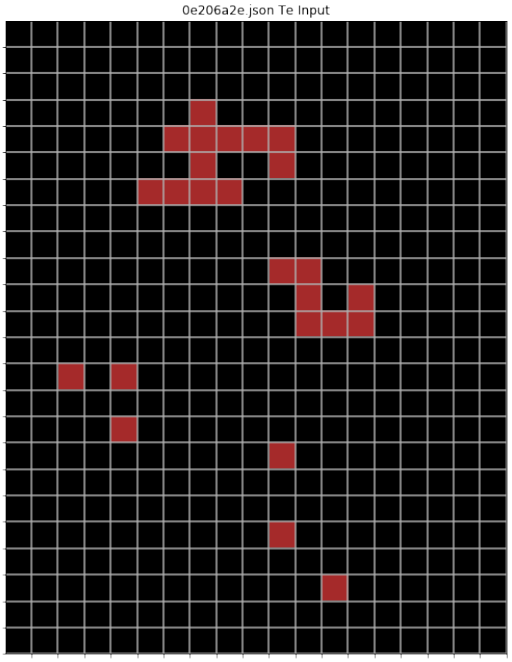
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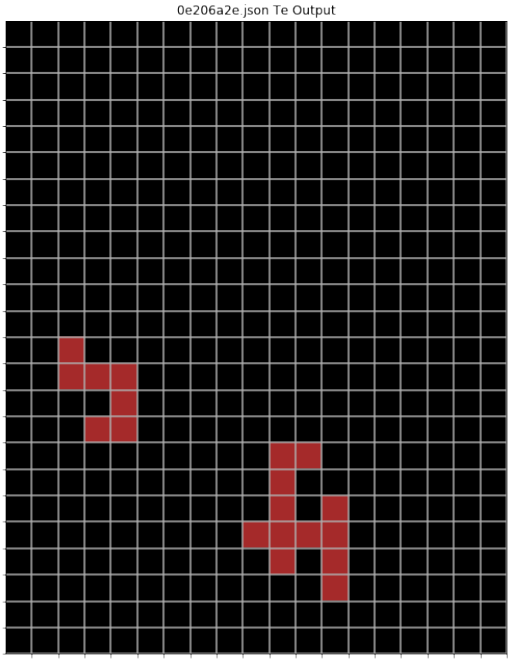
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i = 7
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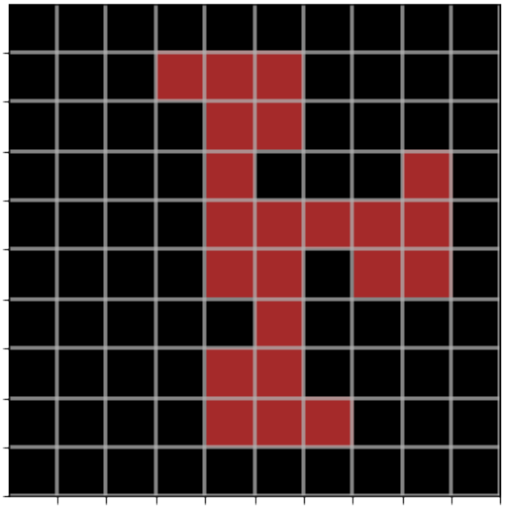
1b60fb0c.json Tr Input



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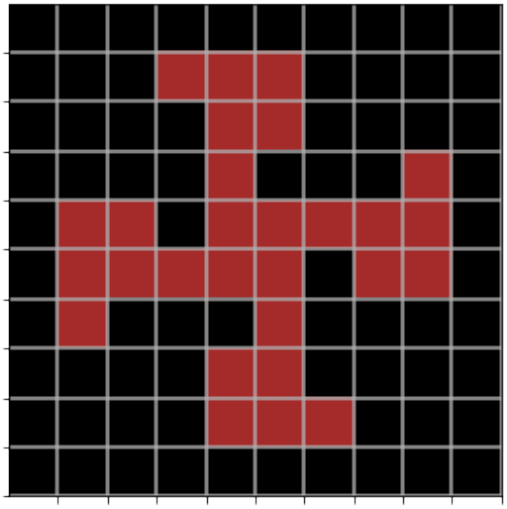

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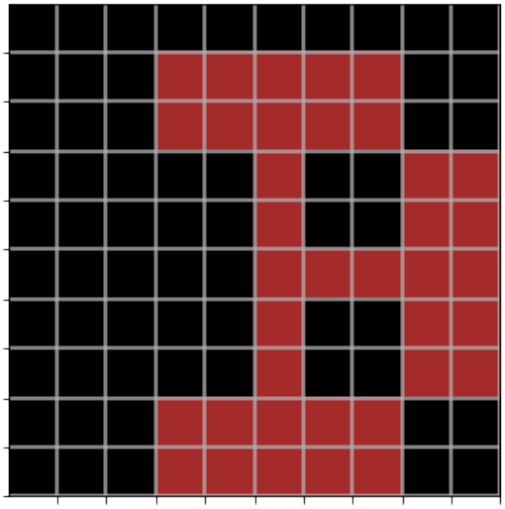

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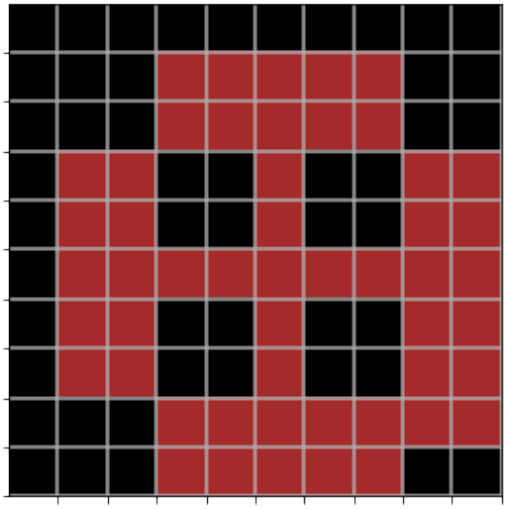

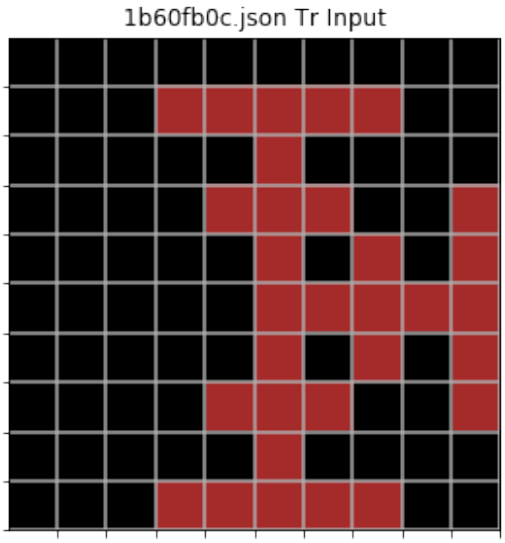
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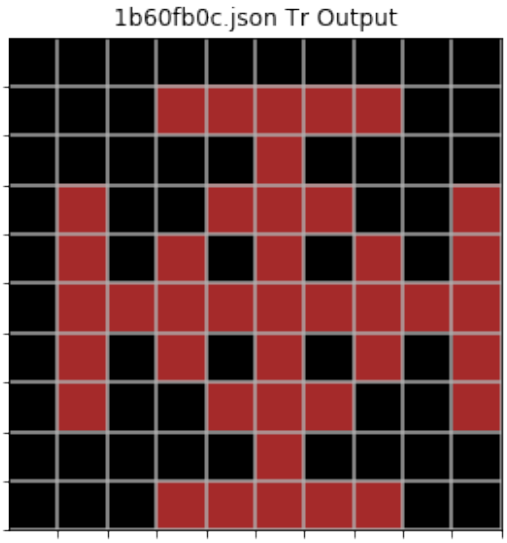
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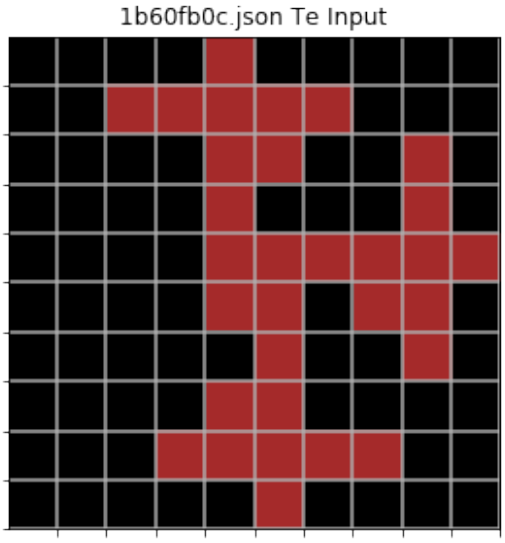
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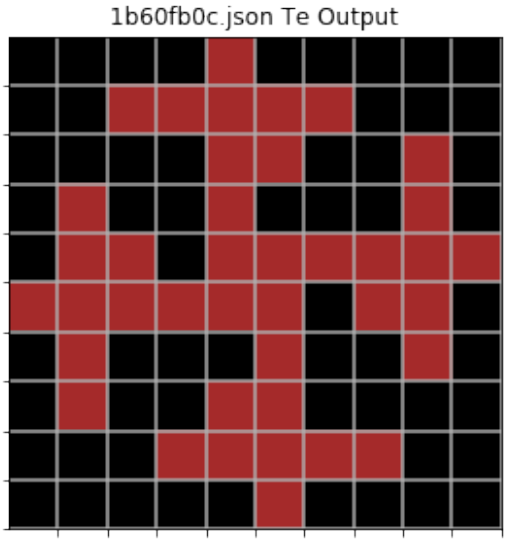
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i = 8
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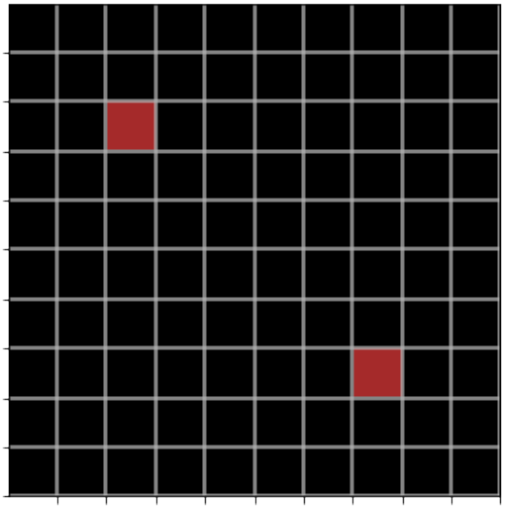
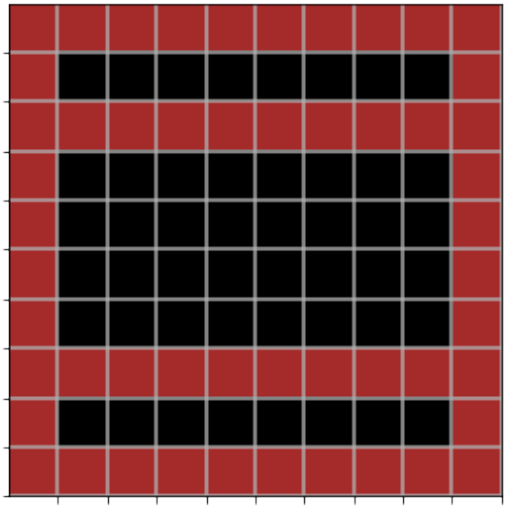
1bfc4729.json Tr Input



1bfc4729.json Tr Output



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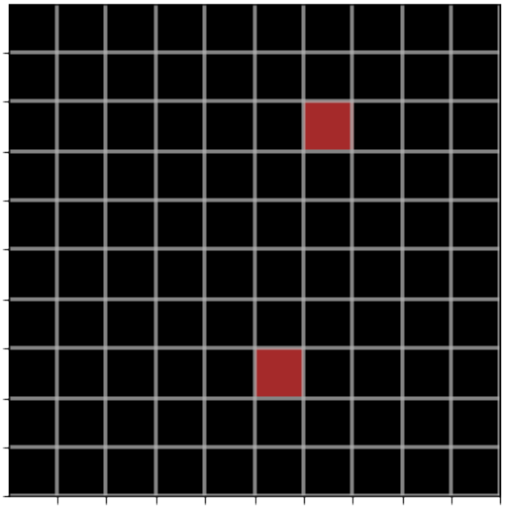

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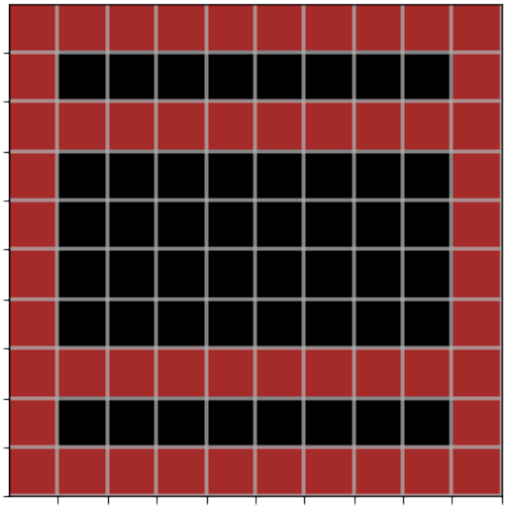

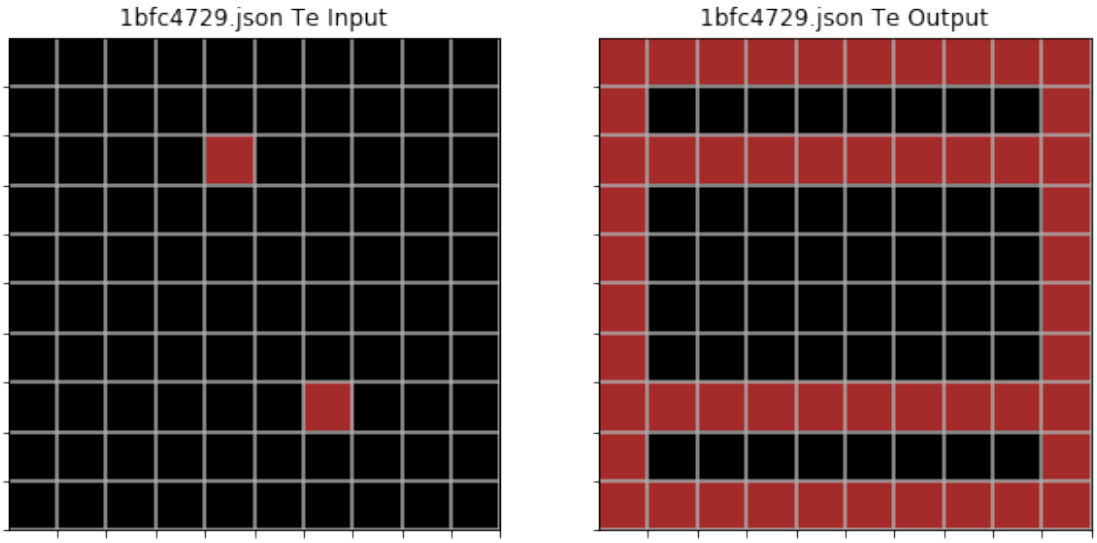
1bfc4729.json Te Input
1bfc4729.json Te Output

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i = 9
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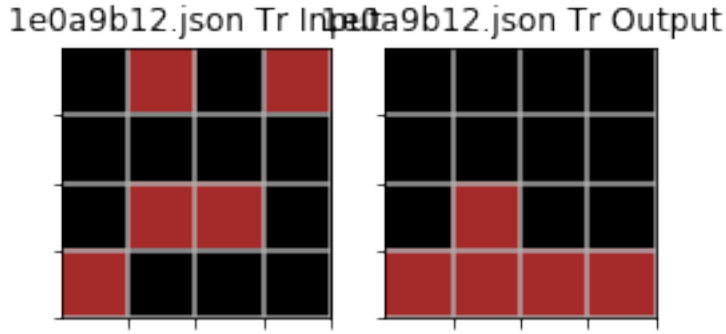
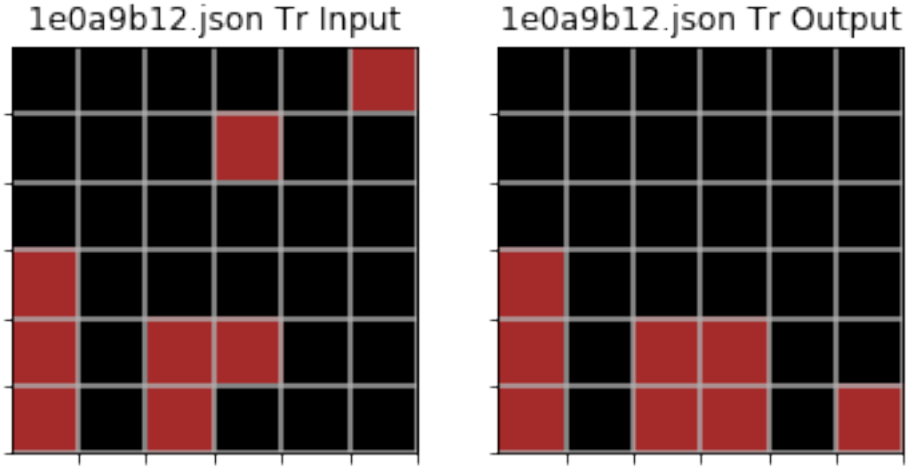

1e0a9b12.json Tr Input
1e0a9b12.json Tr Output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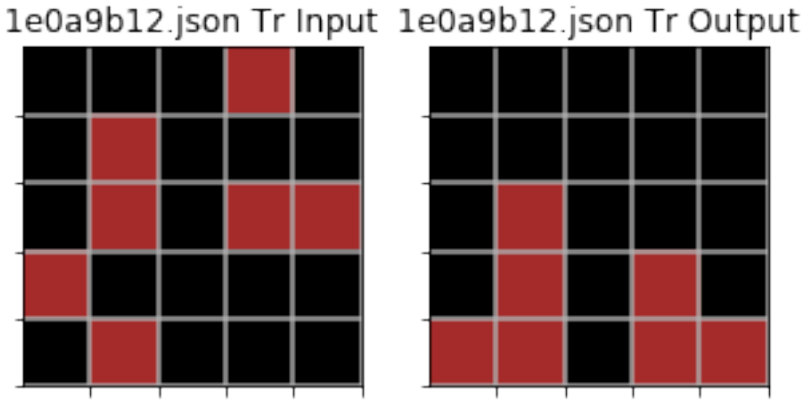
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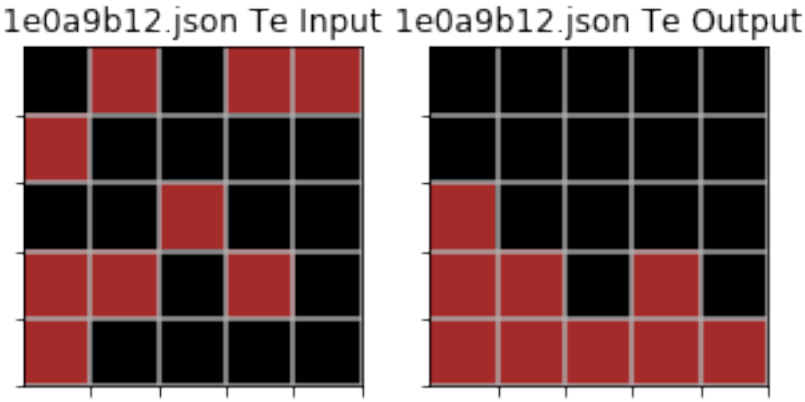
1e0a9b12.json Te Input
1e0a9b12.json Te Output

```
i = 10
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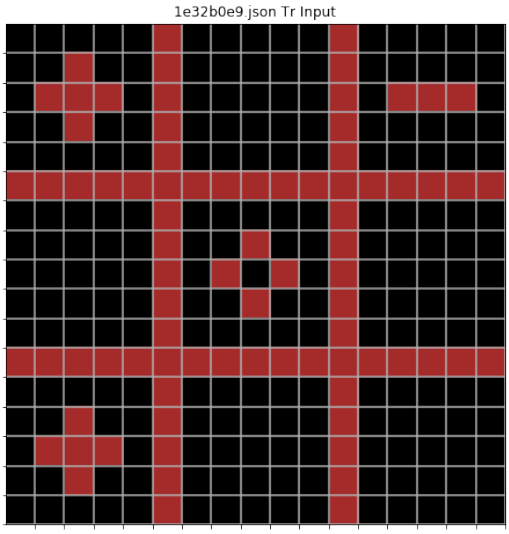
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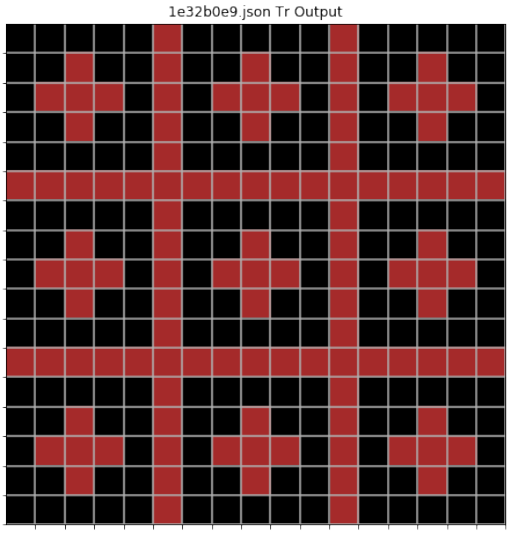
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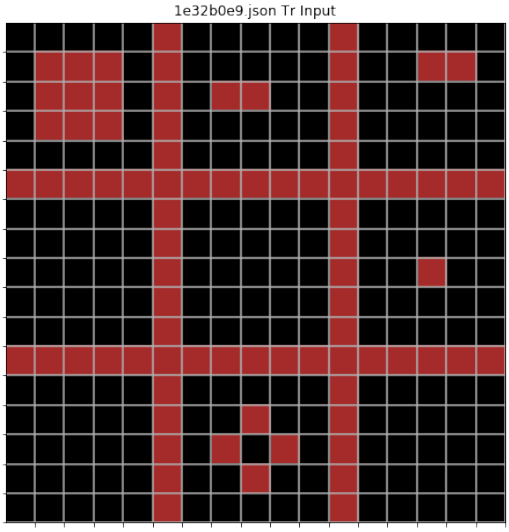
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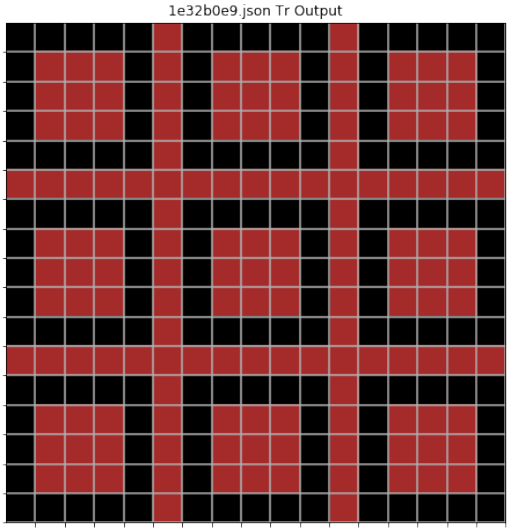
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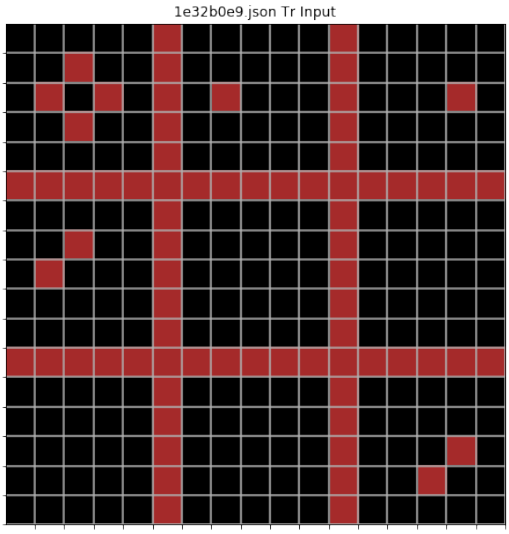
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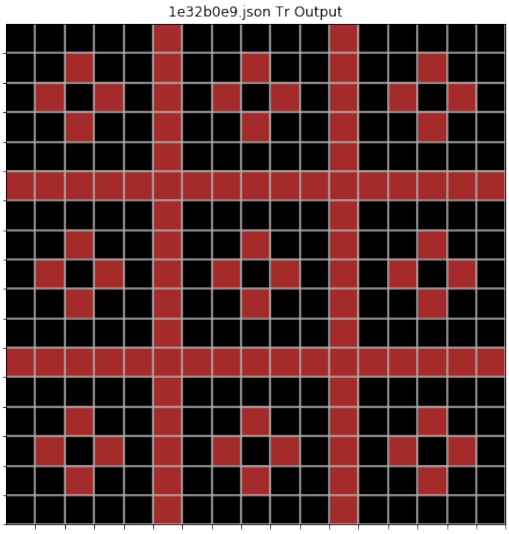
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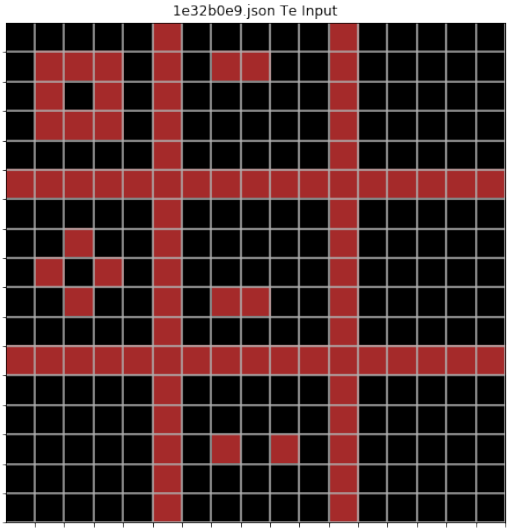
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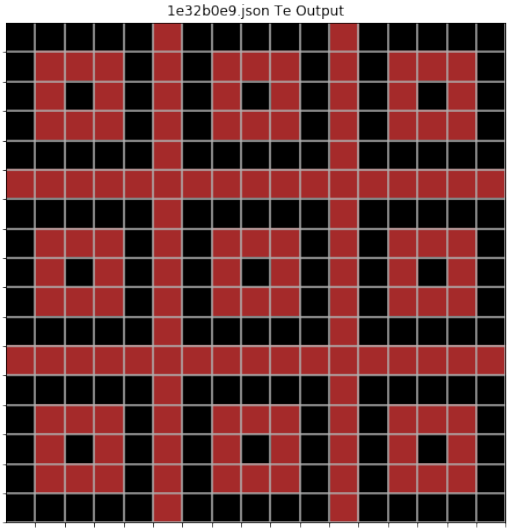
1e32b0e9.json Te Output

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i = 11
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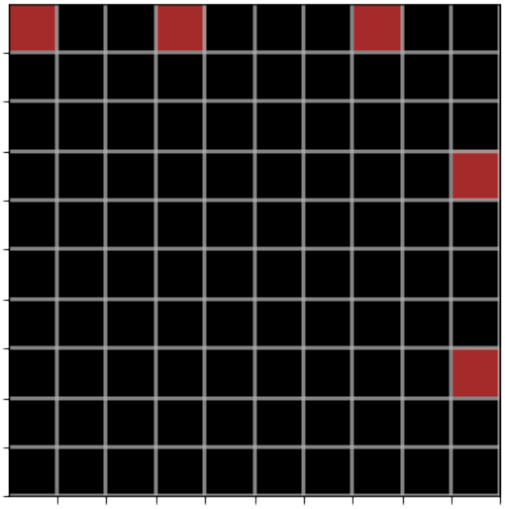
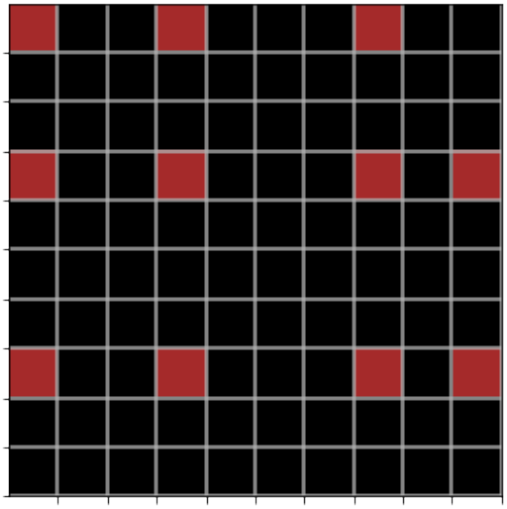
2281f1f4.json Tr Input



2281f1f4.json Tr Output



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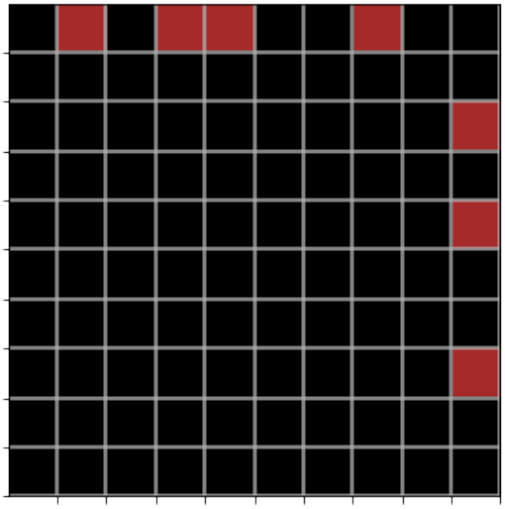

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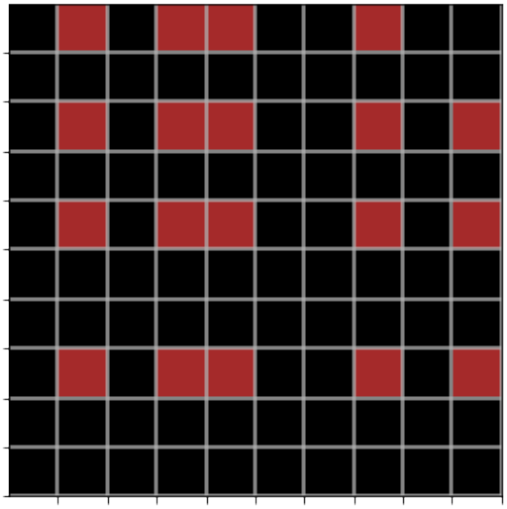

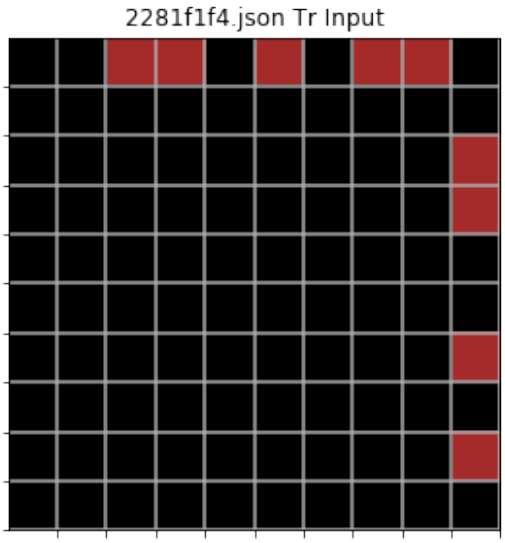
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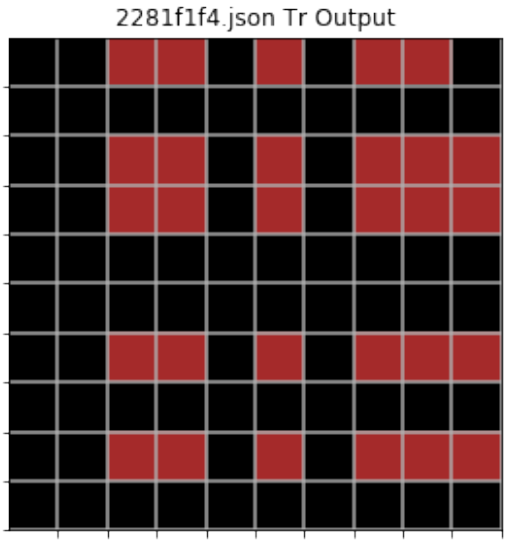
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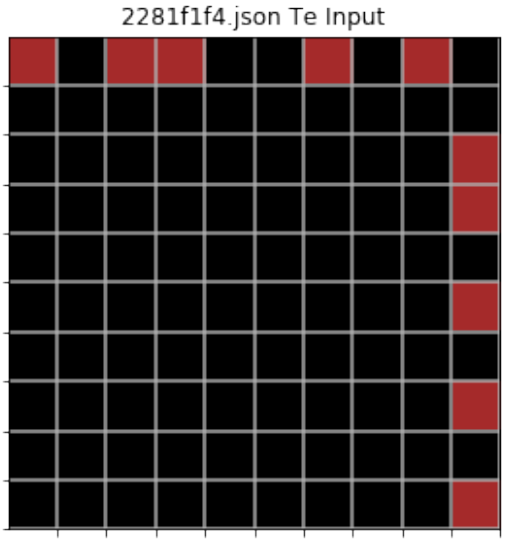
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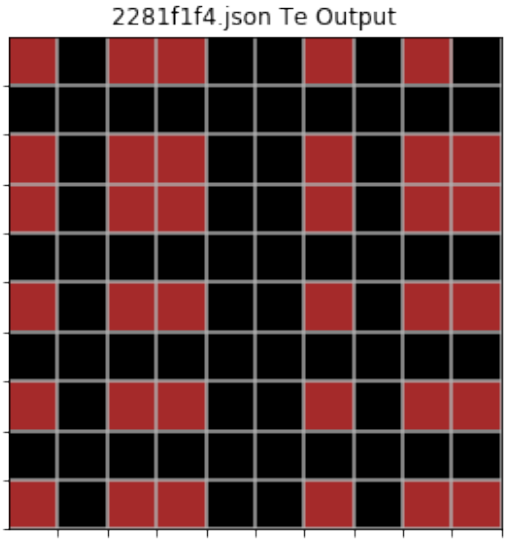
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i = 12
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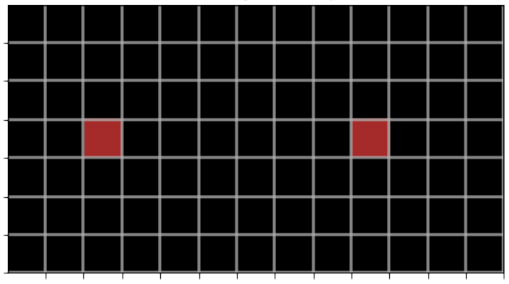
253bf280.json Tr Input



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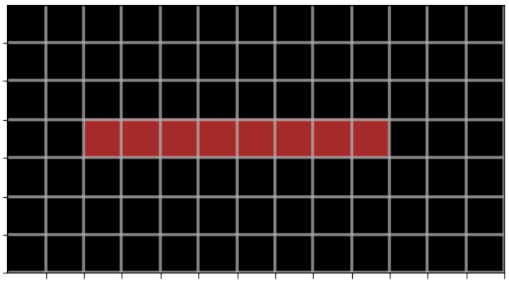

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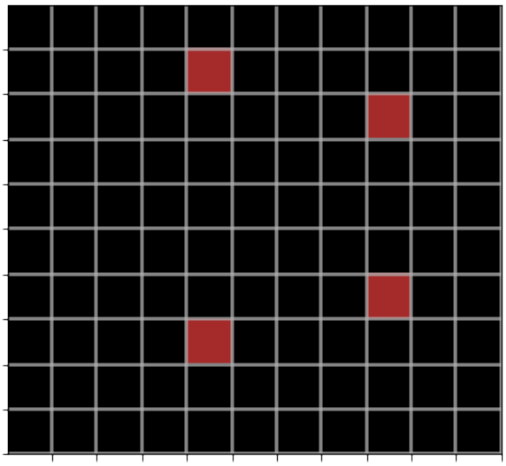

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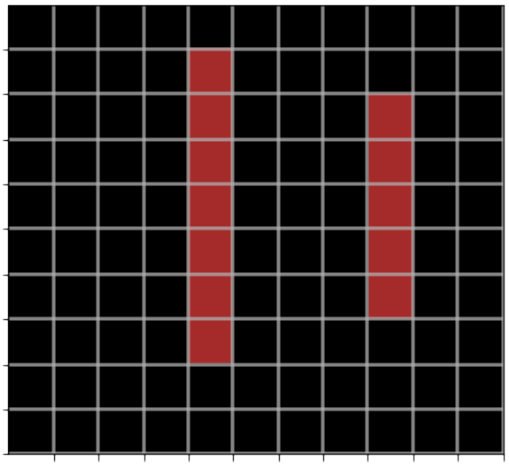

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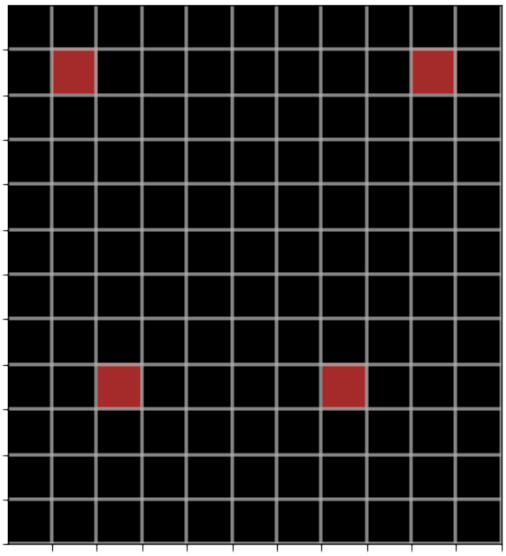

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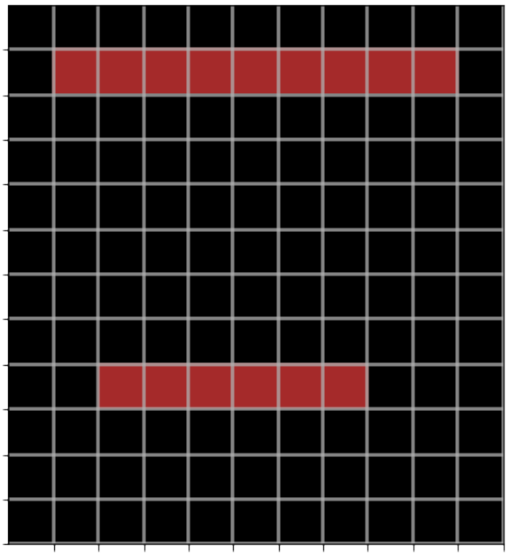

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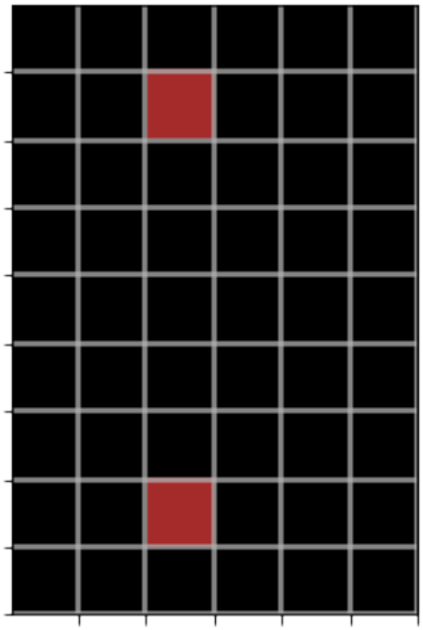

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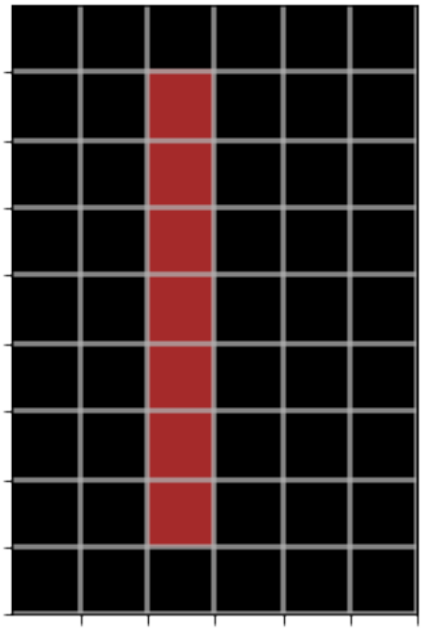

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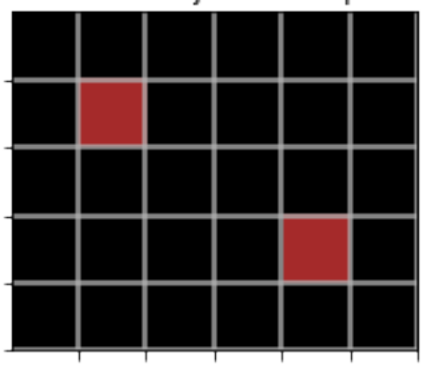

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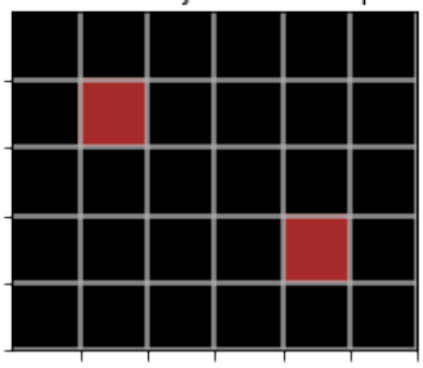

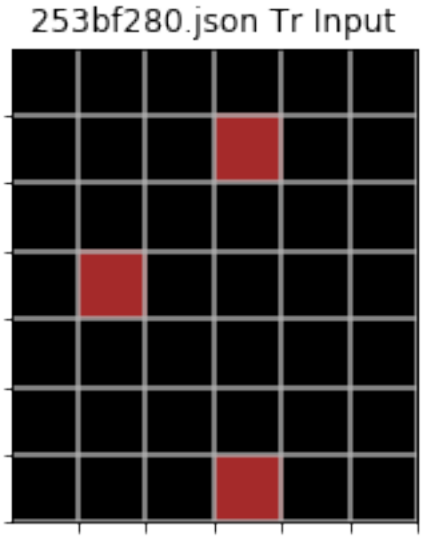
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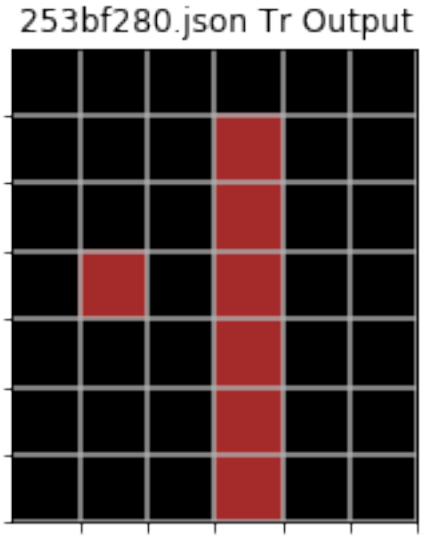
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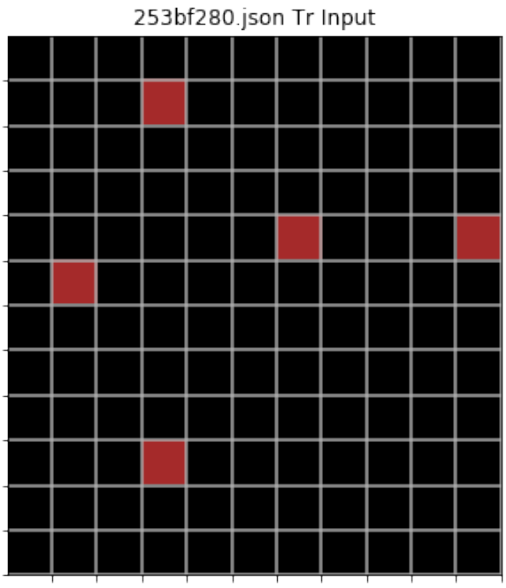
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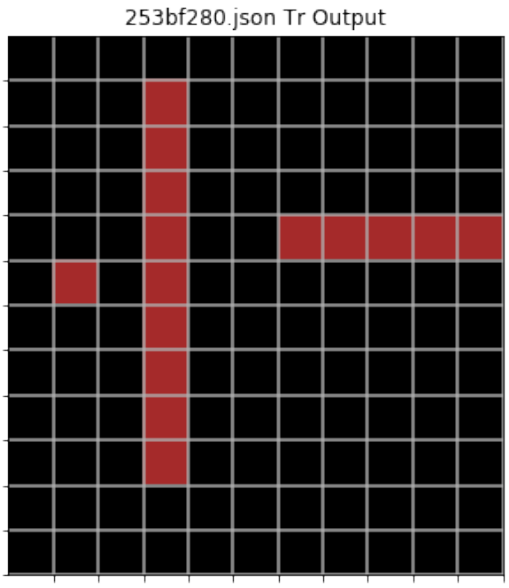
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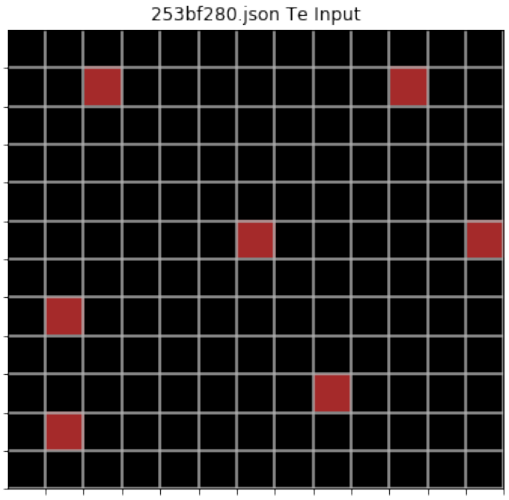
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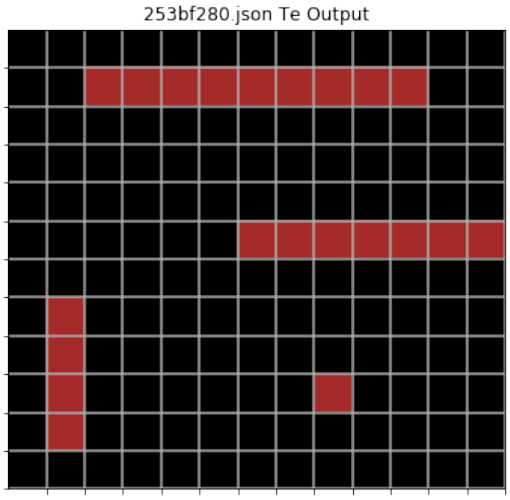
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i = 13
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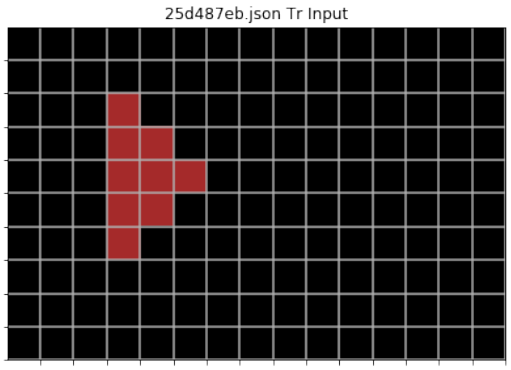
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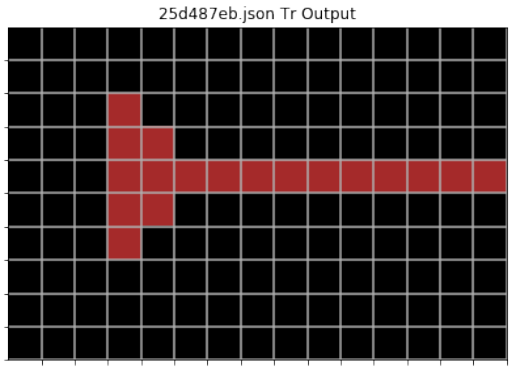
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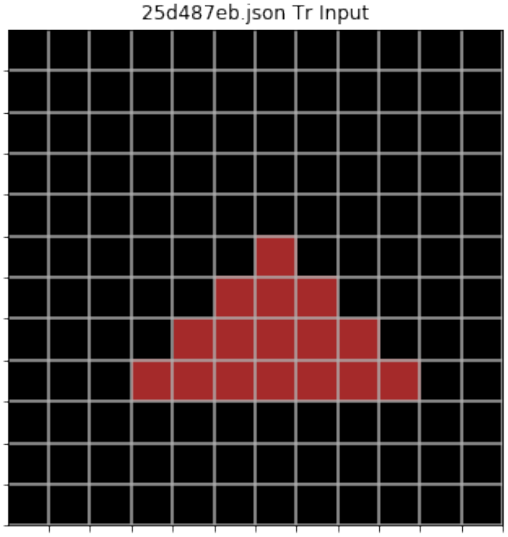

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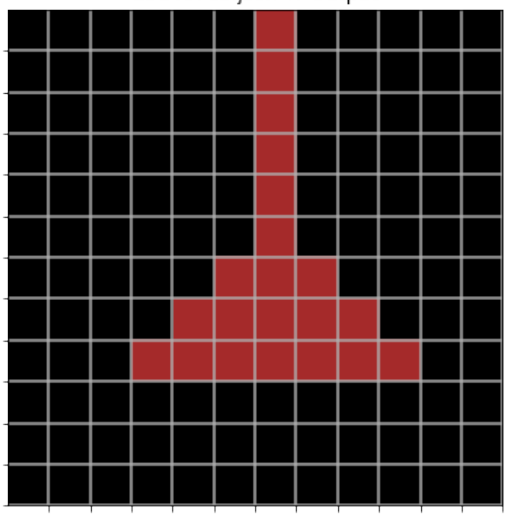

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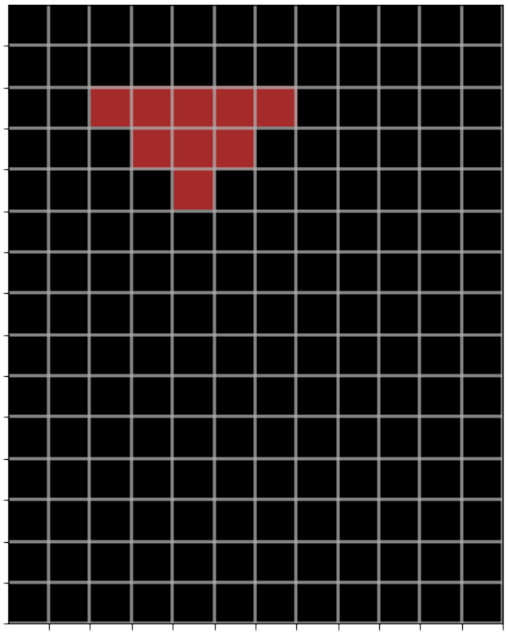

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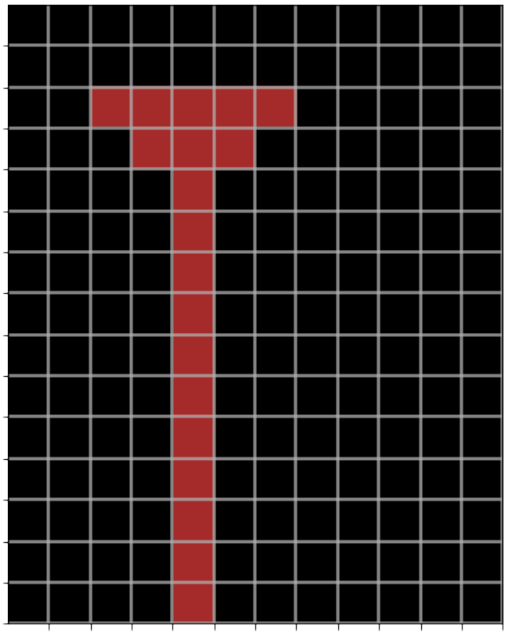

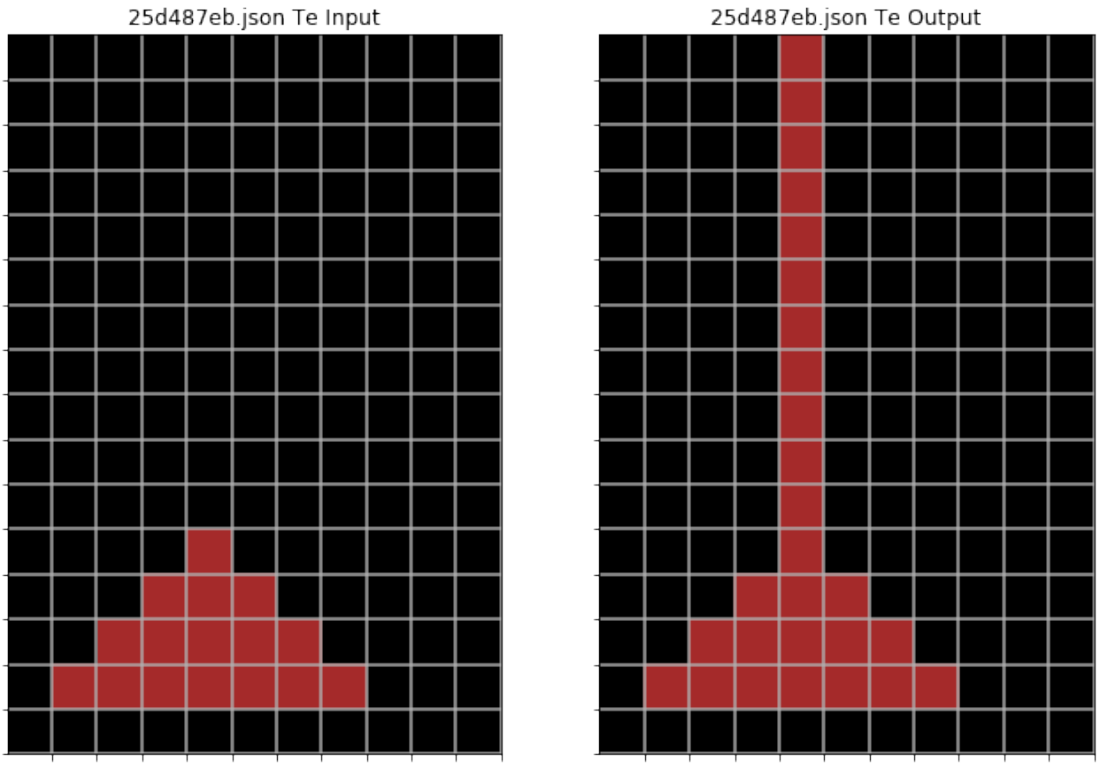
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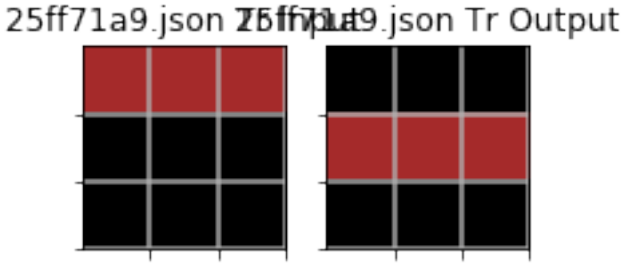
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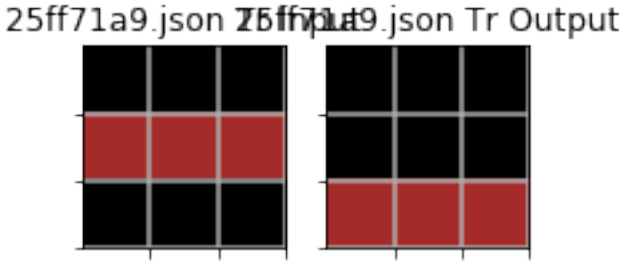
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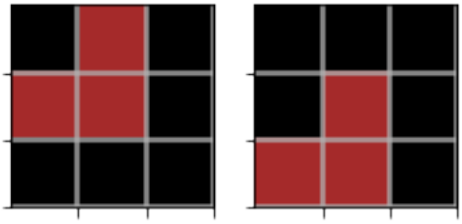

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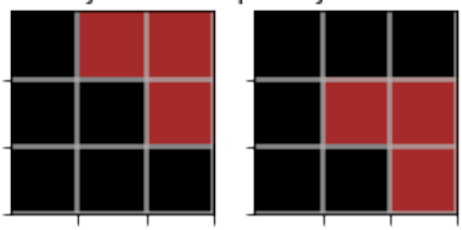

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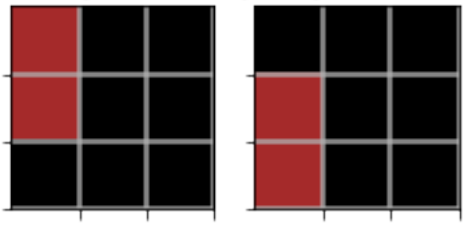

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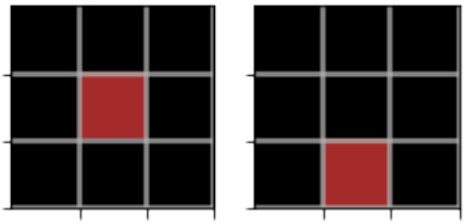

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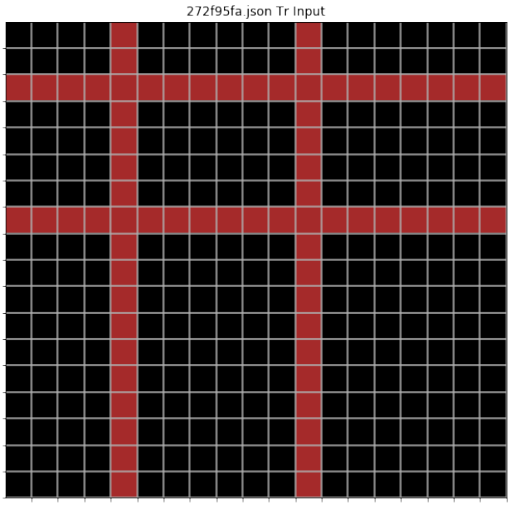
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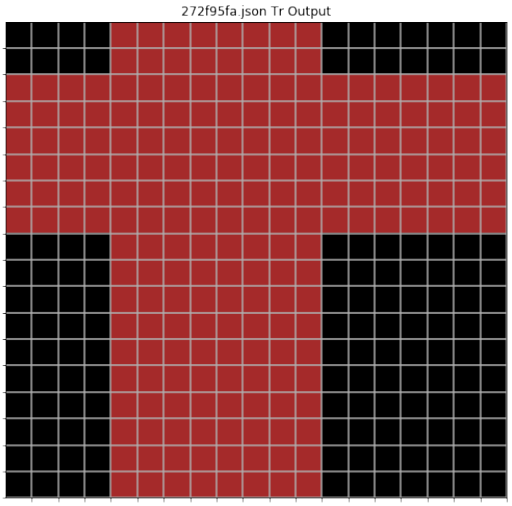
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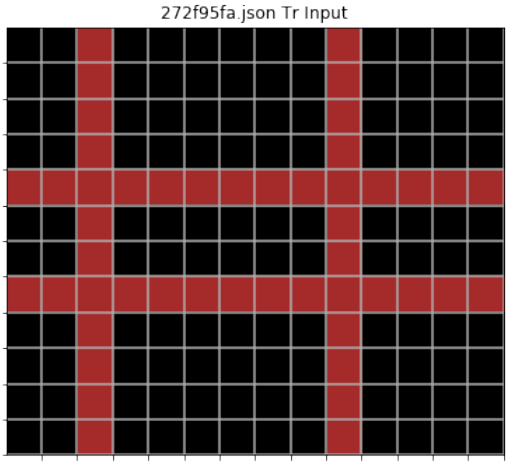
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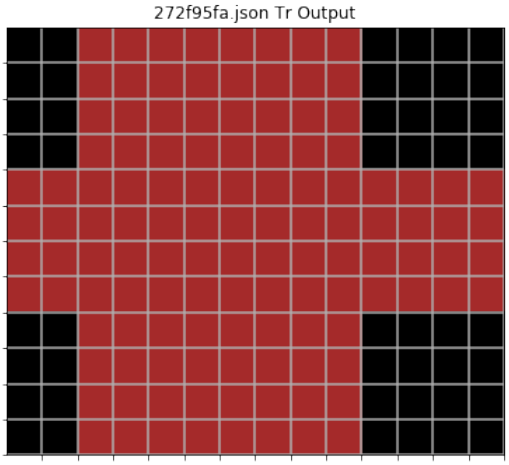
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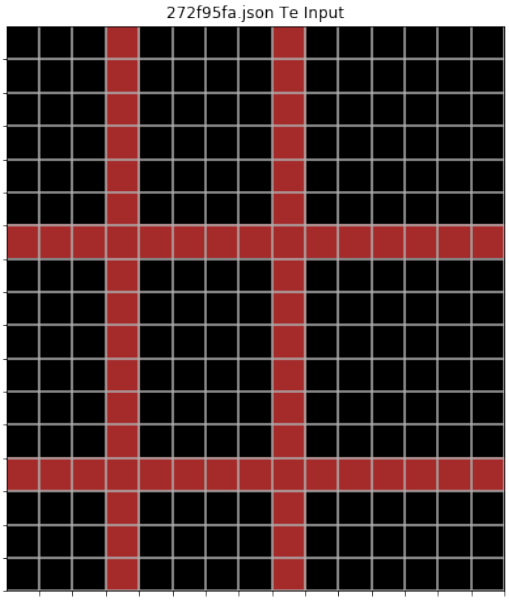
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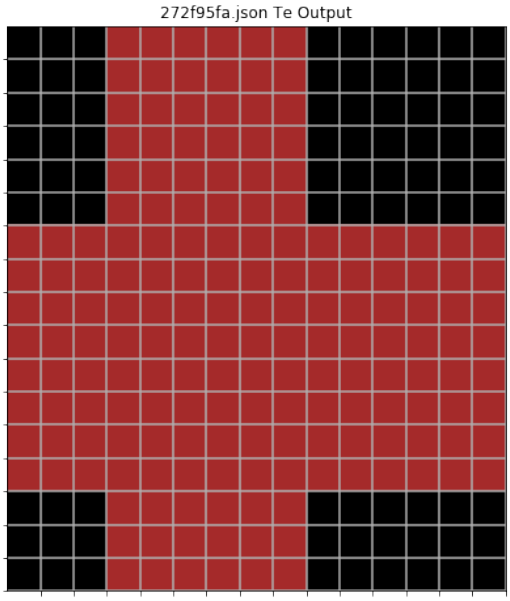
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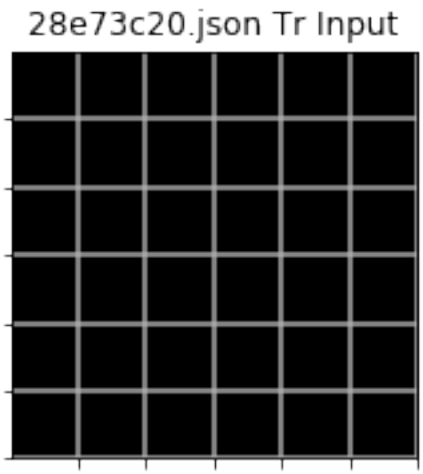
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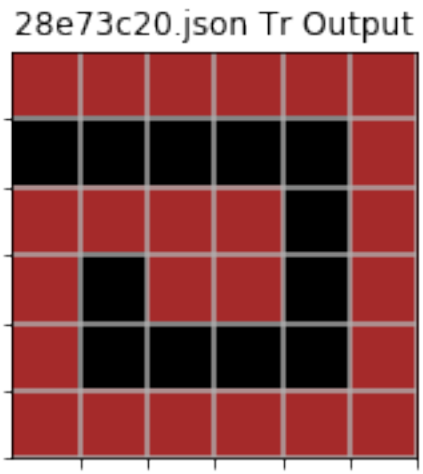
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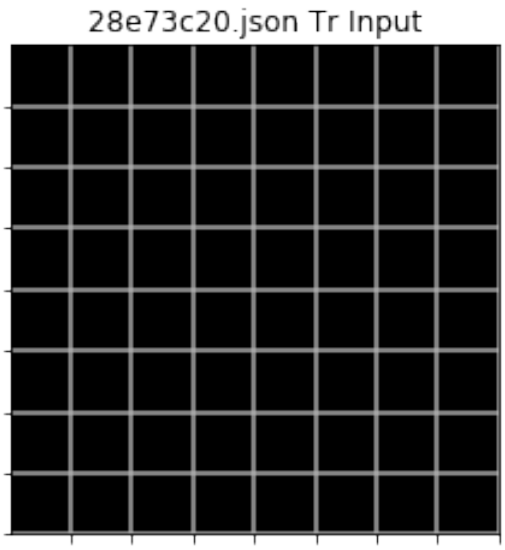
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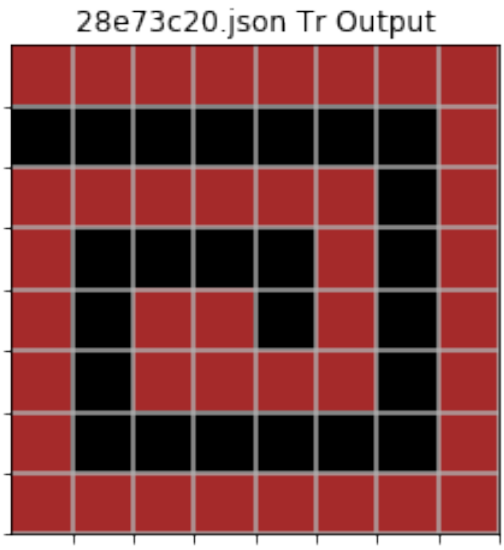
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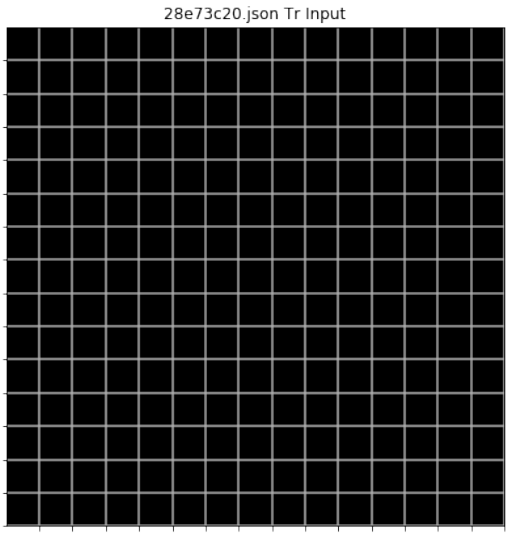
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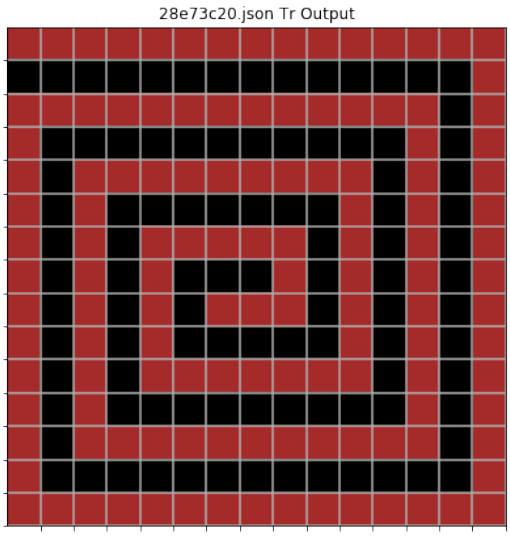
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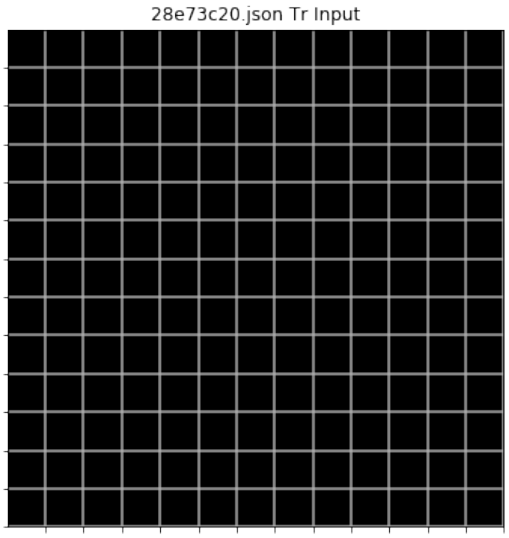
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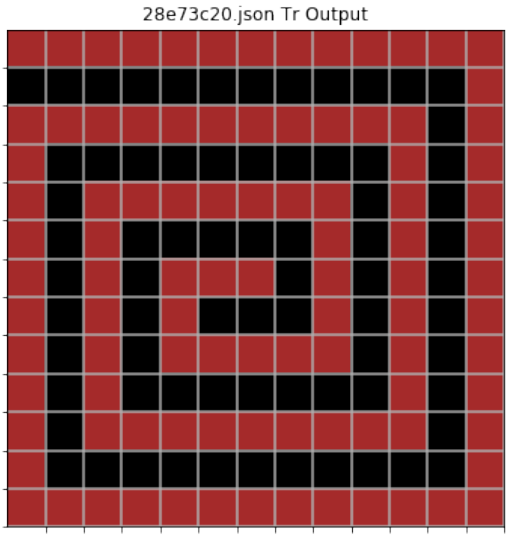
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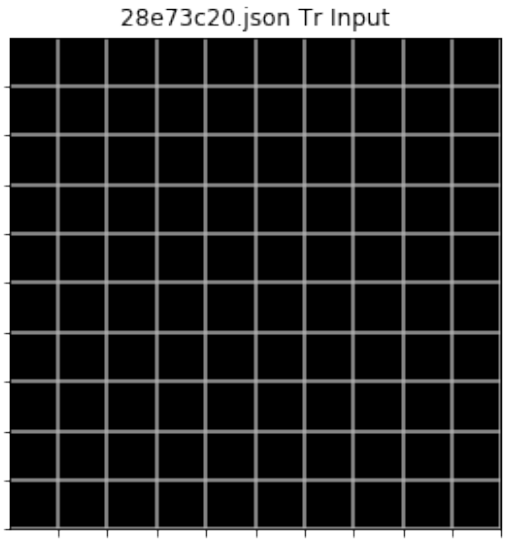
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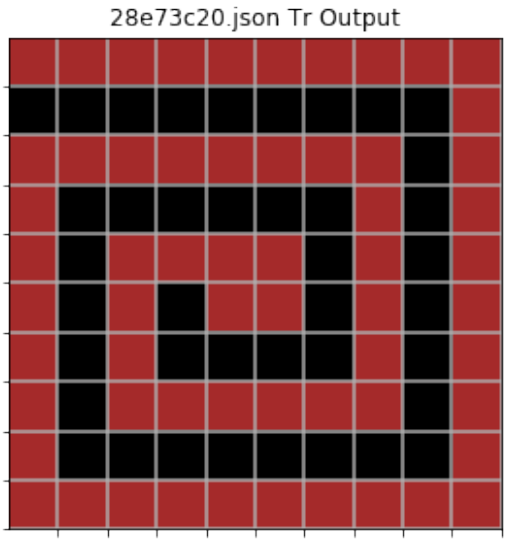
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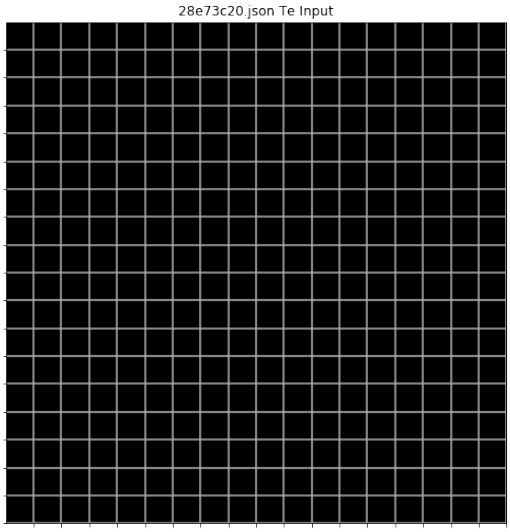
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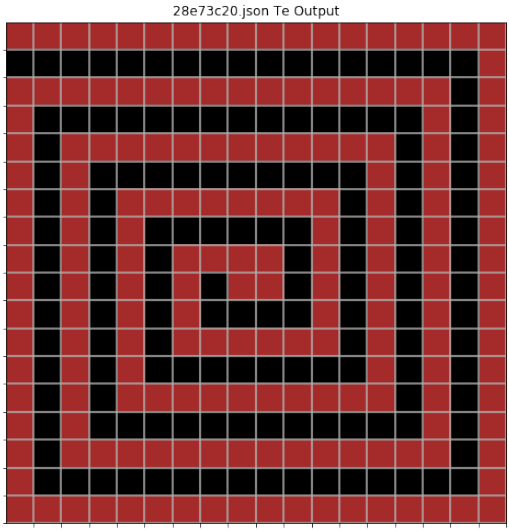
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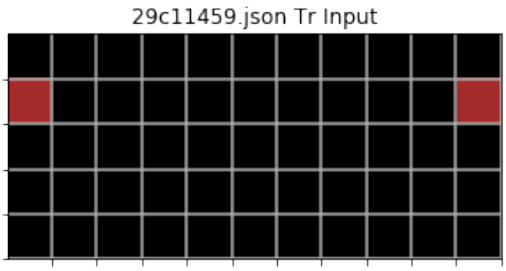
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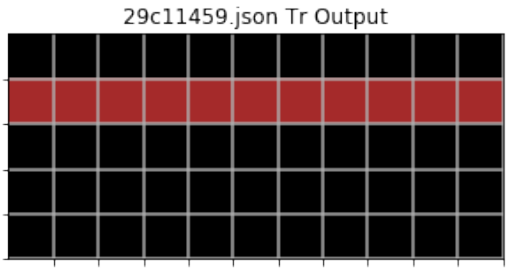
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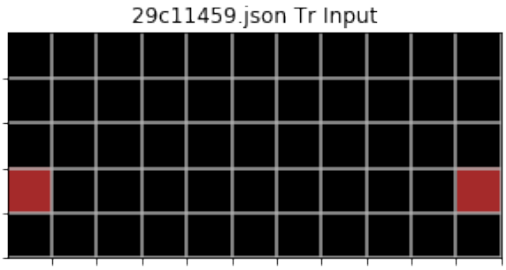
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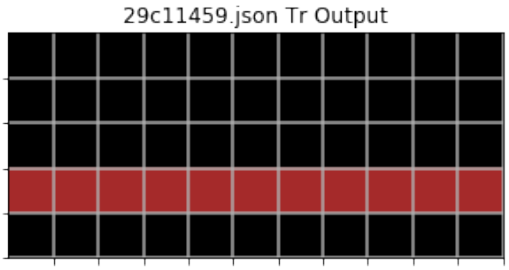
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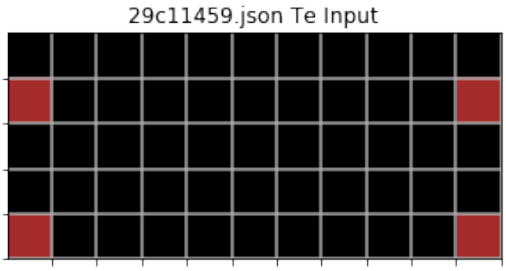
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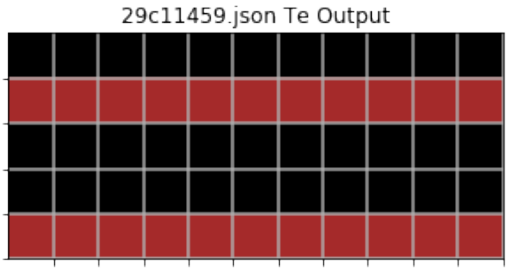
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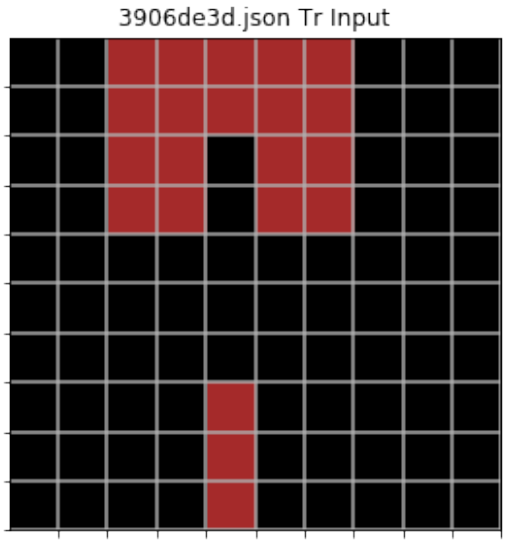
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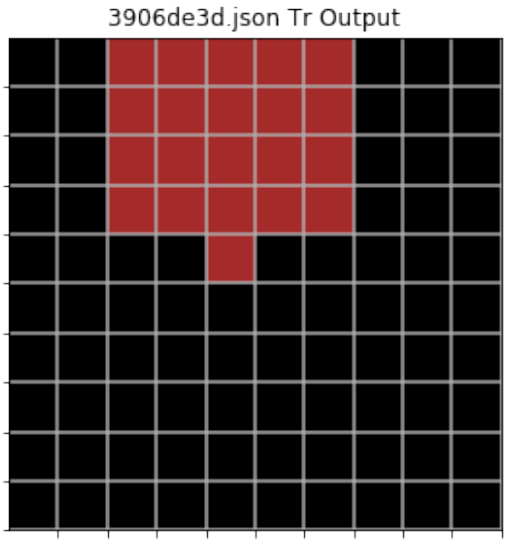
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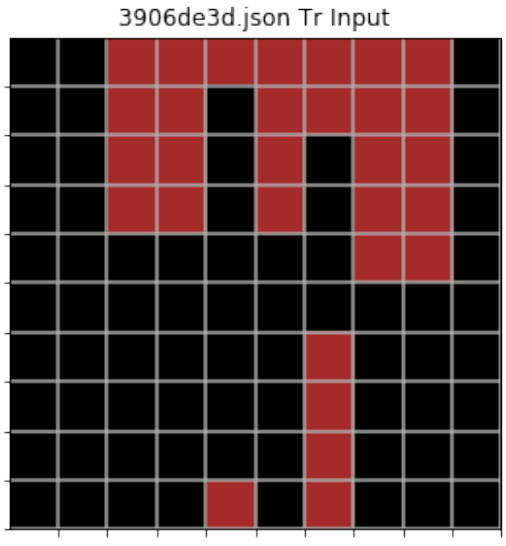
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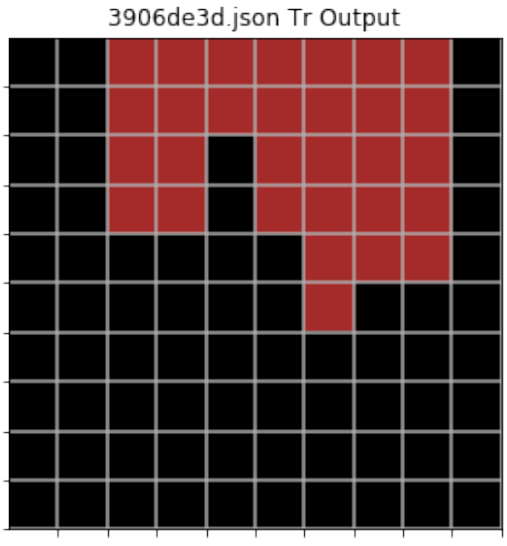
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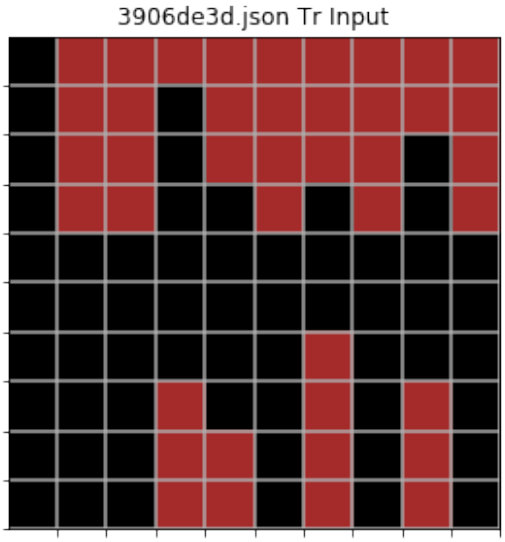
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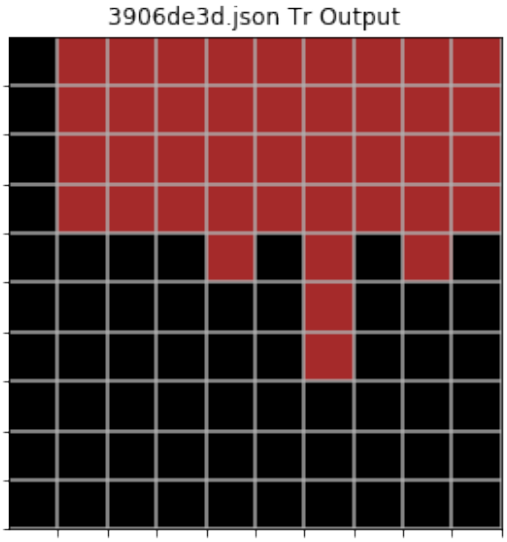
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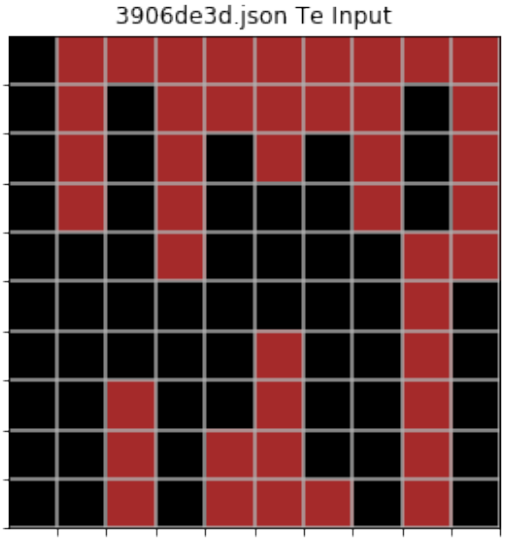
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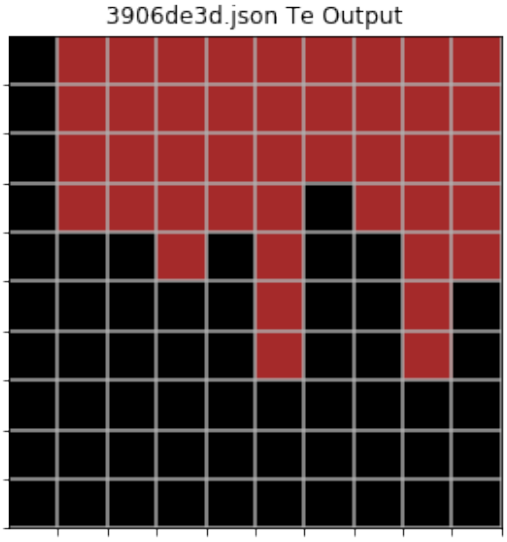
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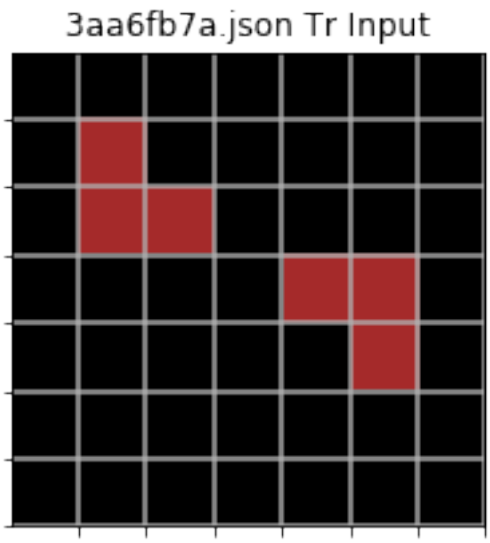
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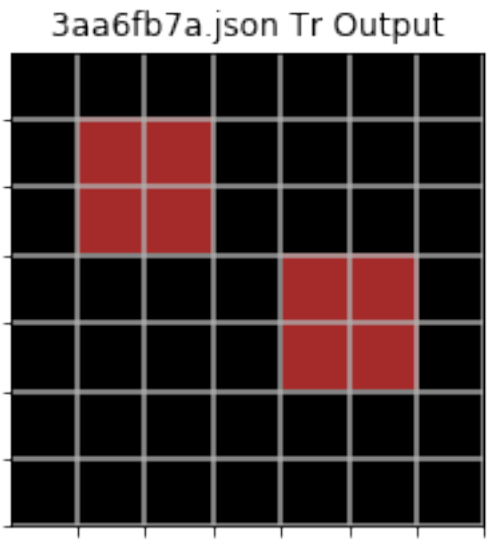
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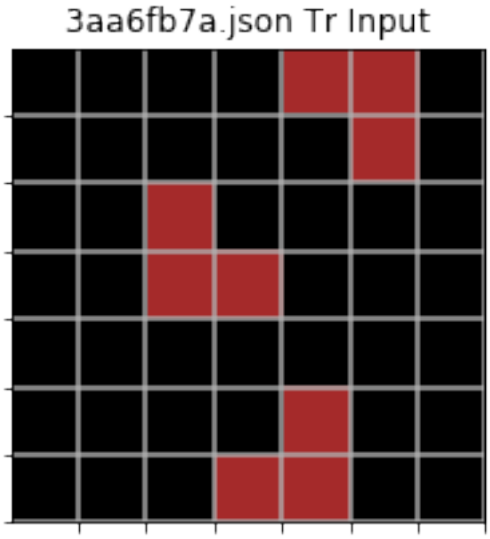
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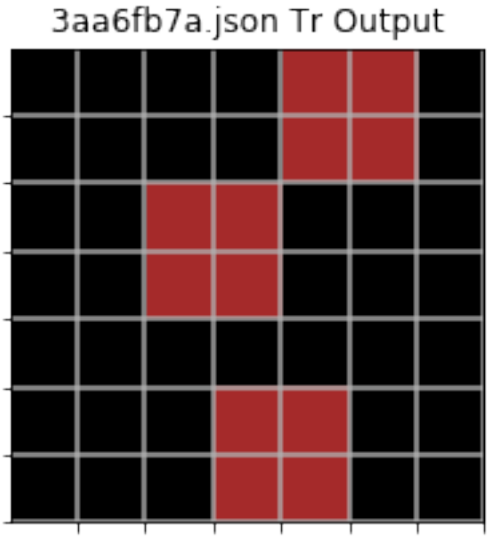
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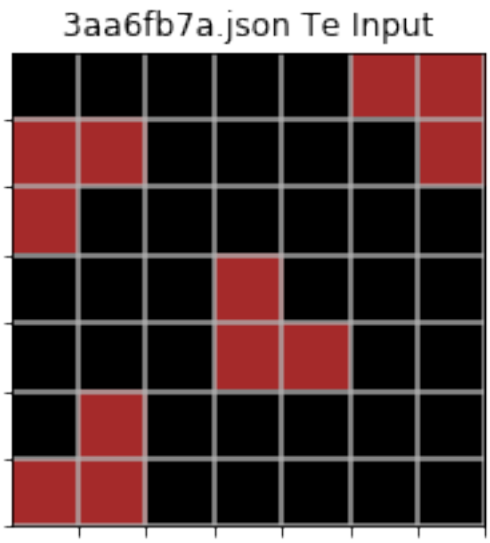
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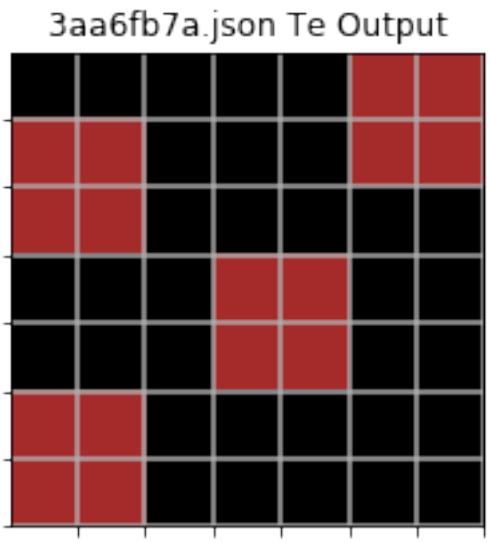
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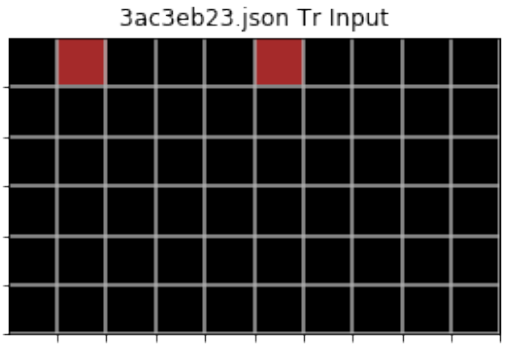
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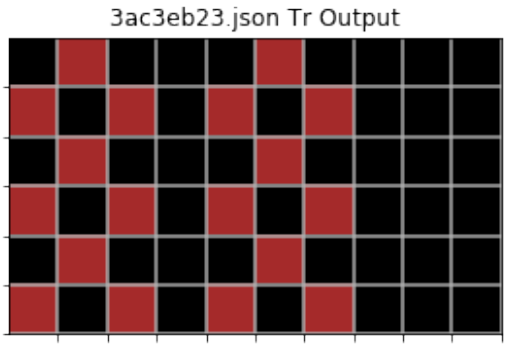
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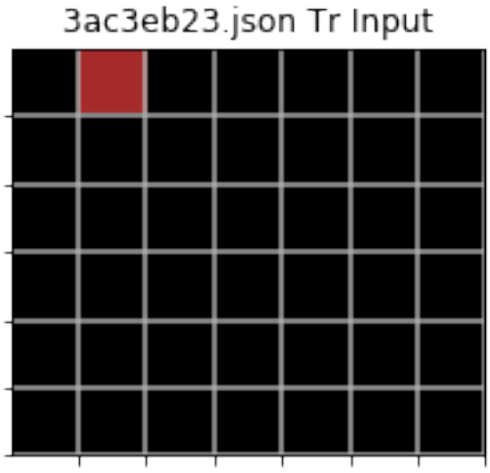
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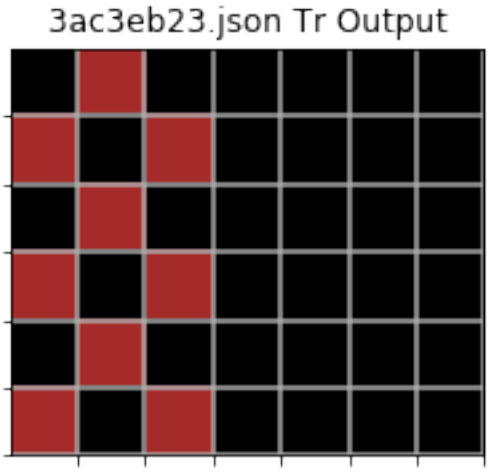
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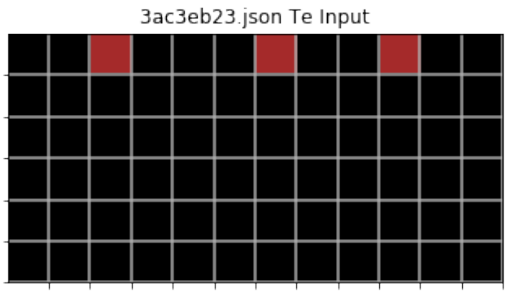
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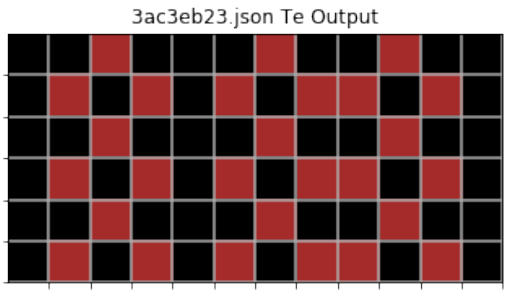
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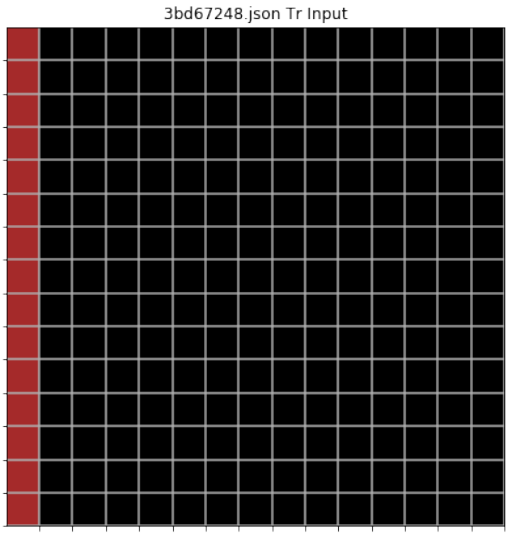
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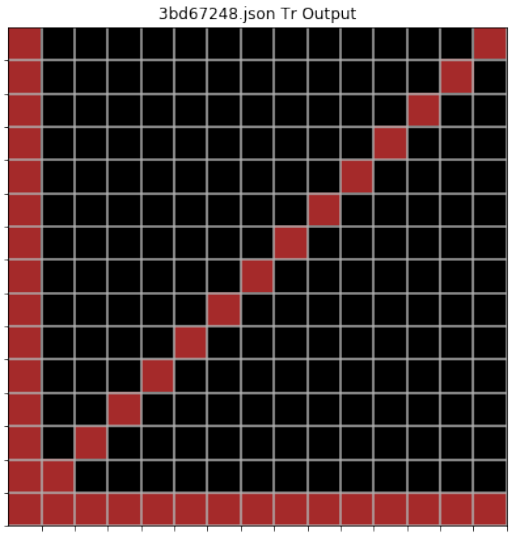
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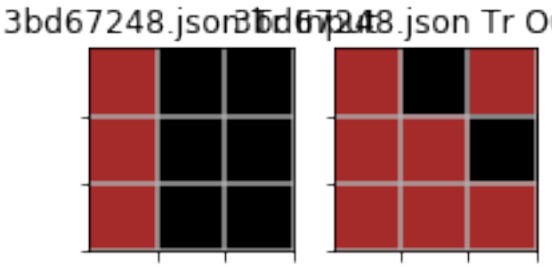
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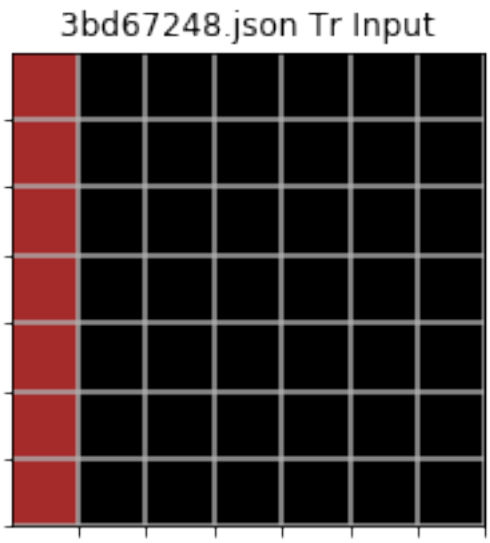
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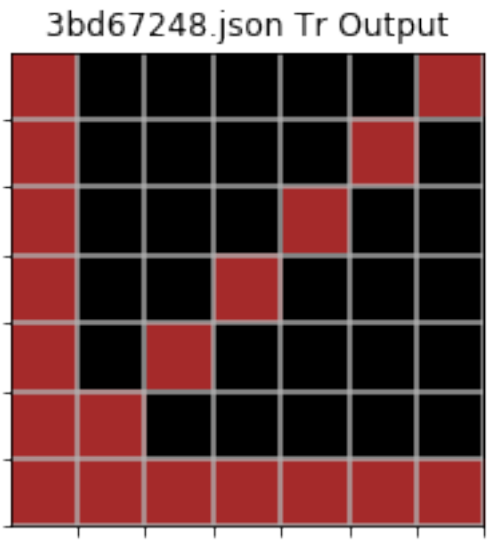
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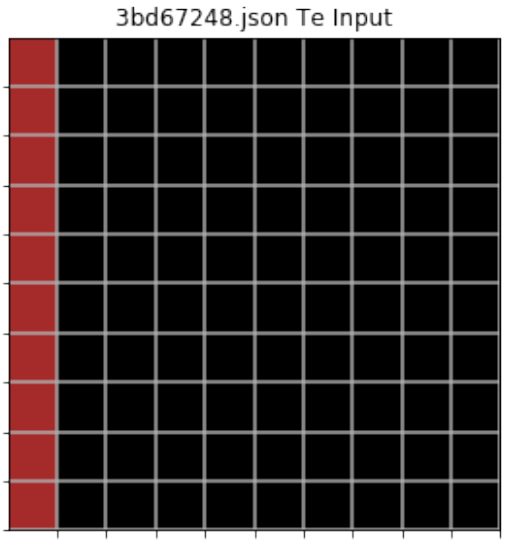
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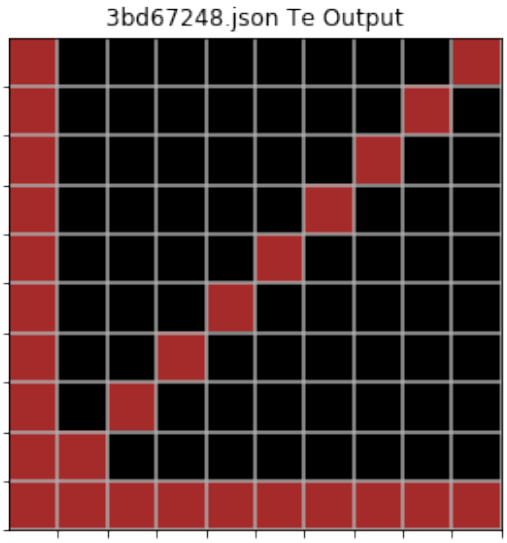
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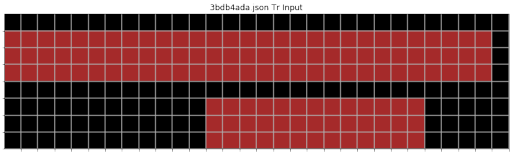
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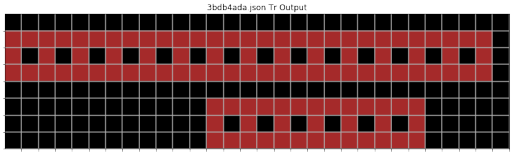
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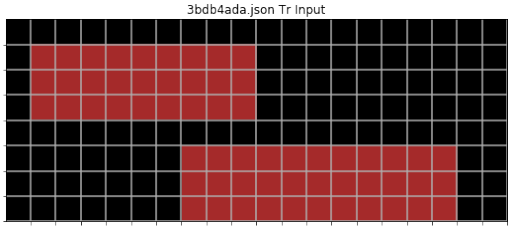
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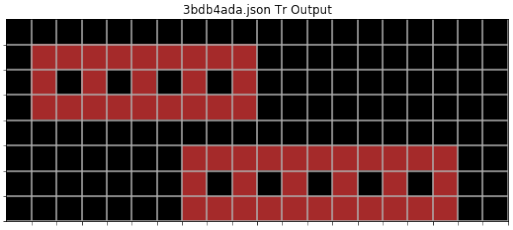
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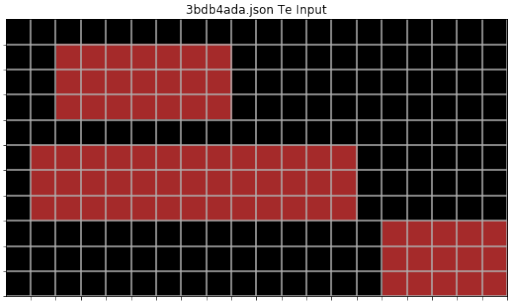
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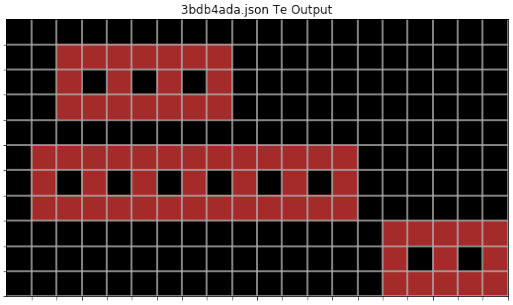
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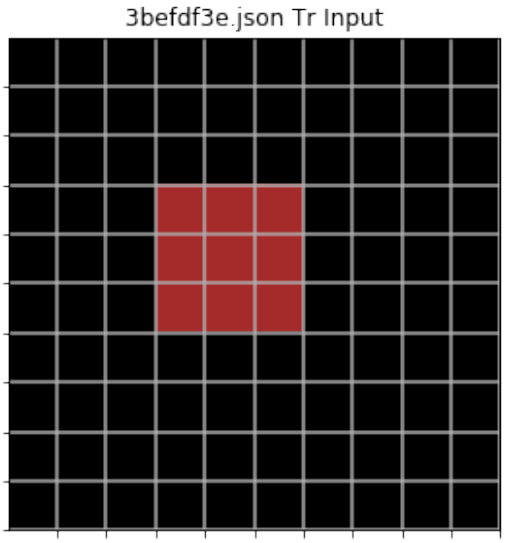
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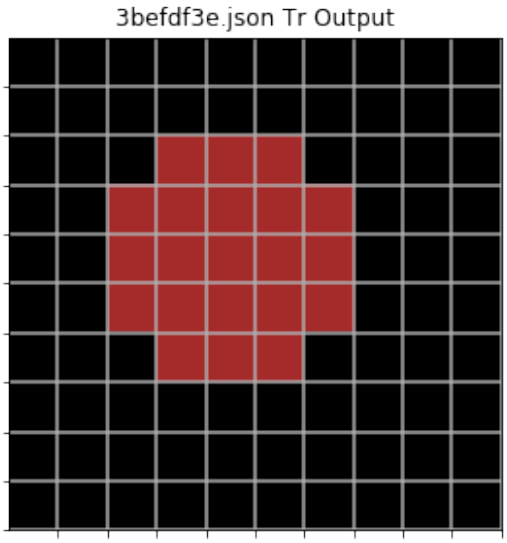
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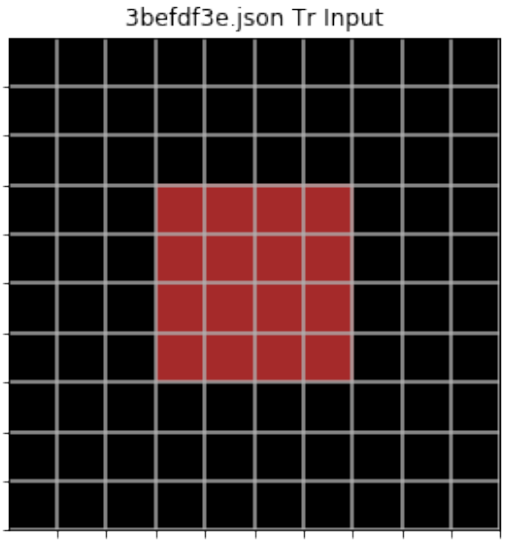
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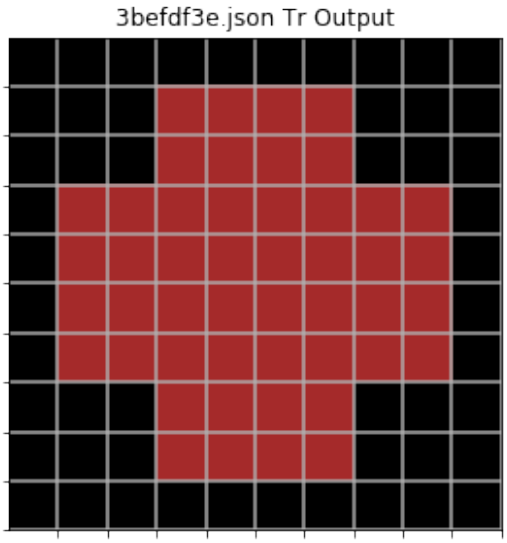
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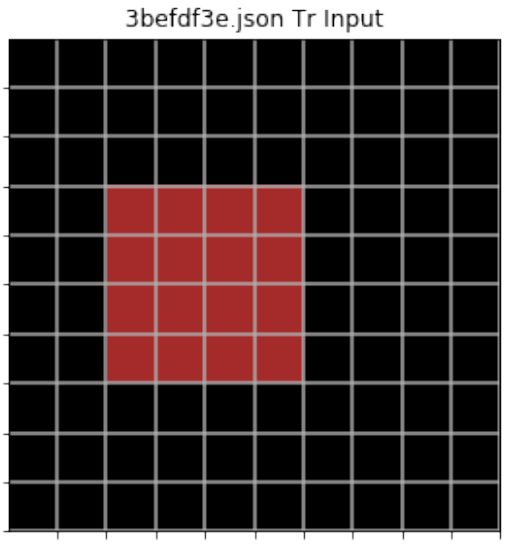
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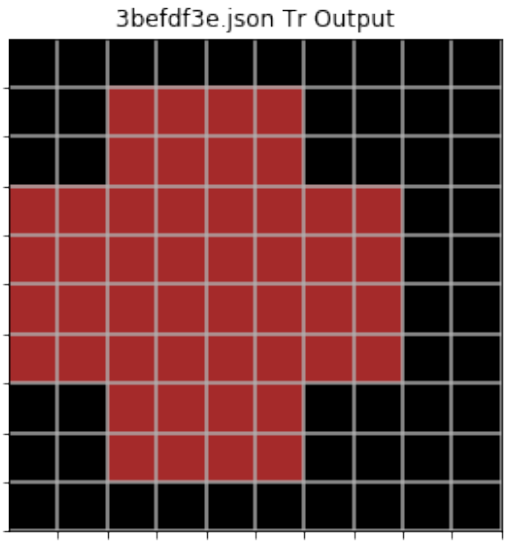
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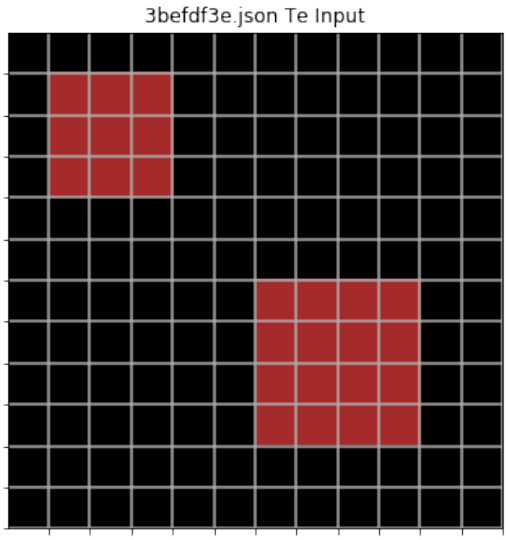
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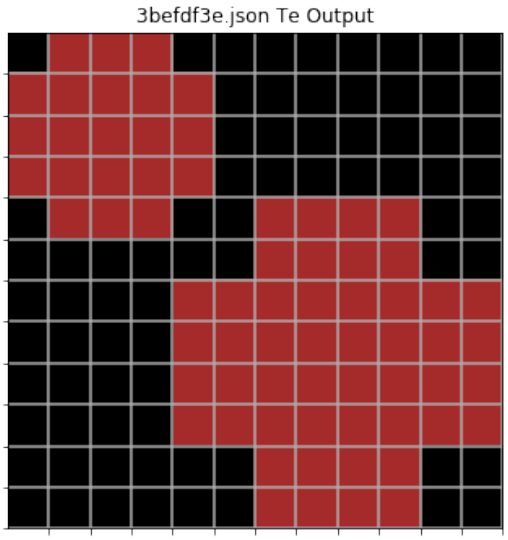
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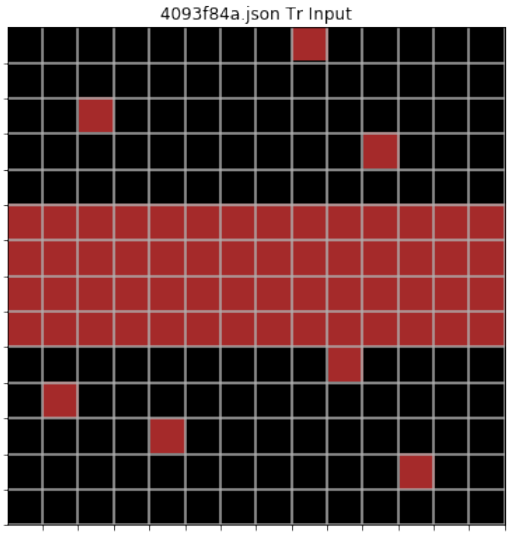
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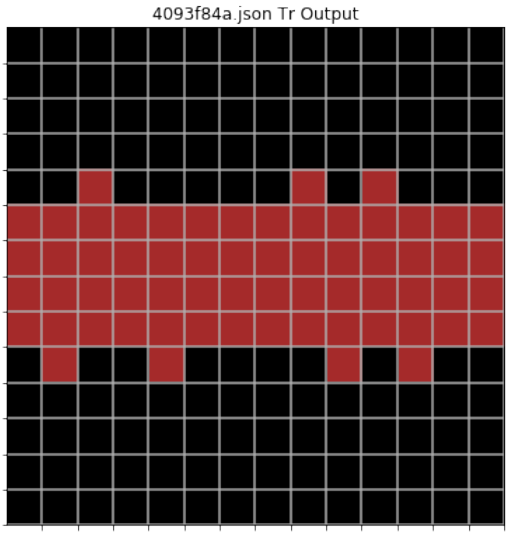
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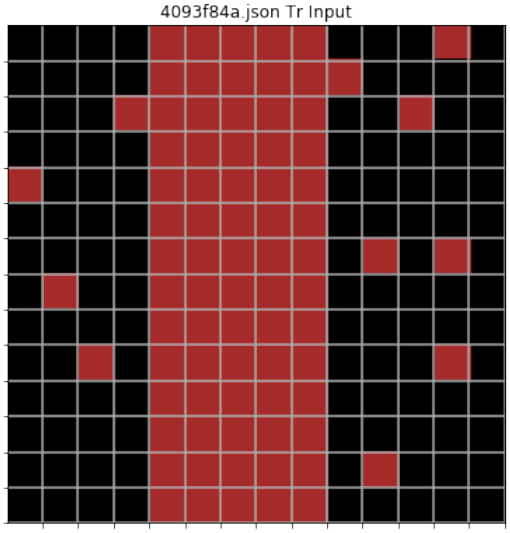

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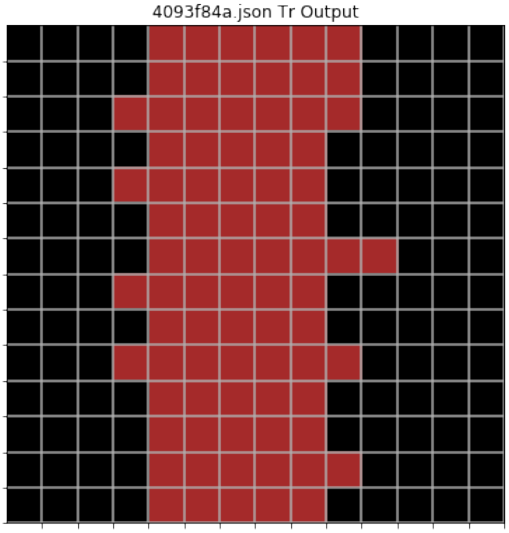

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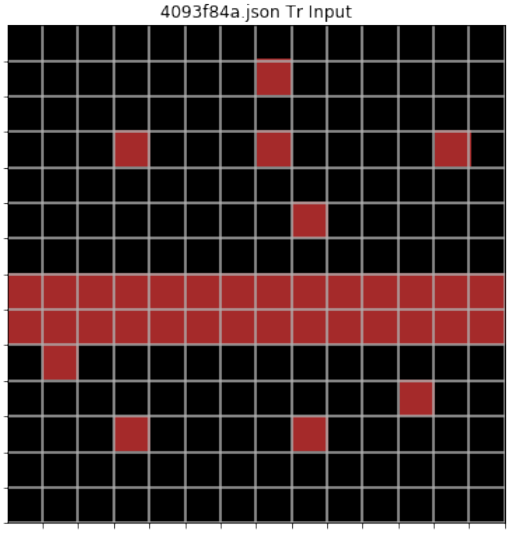

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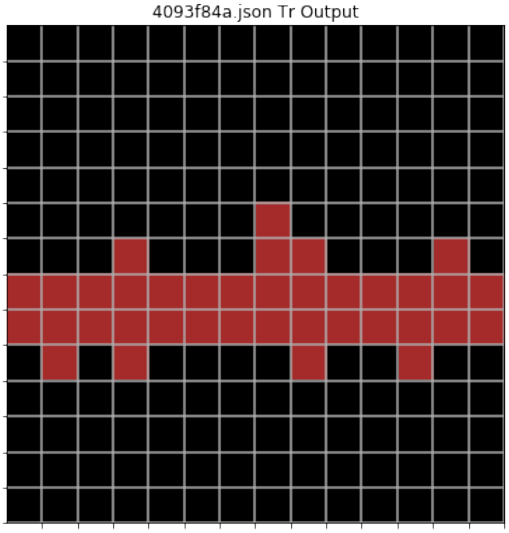

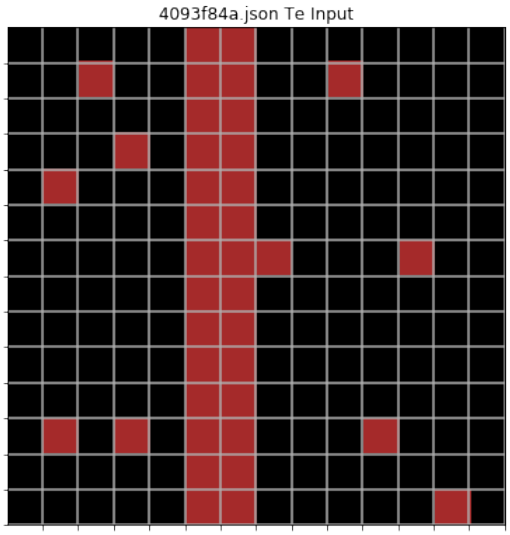
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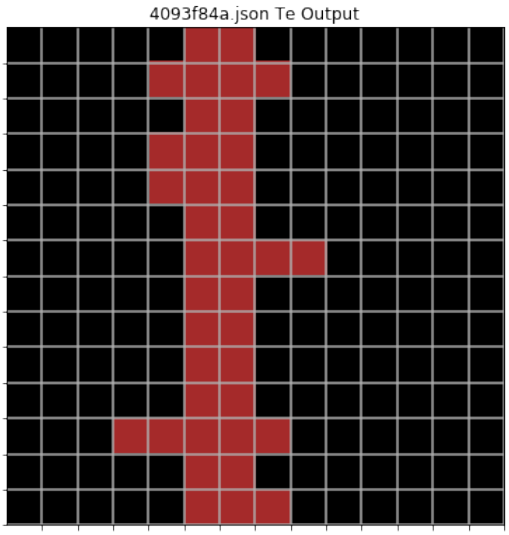
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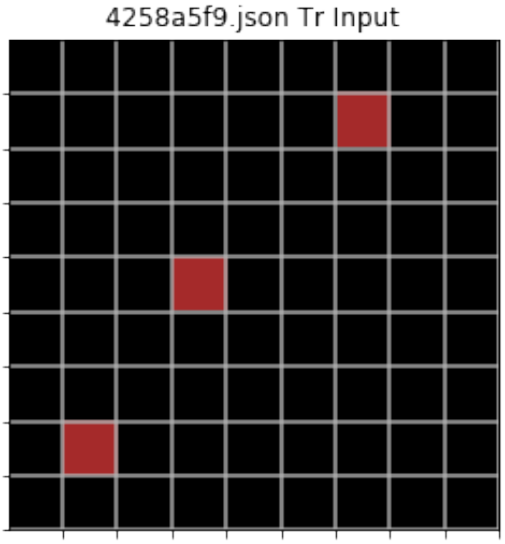
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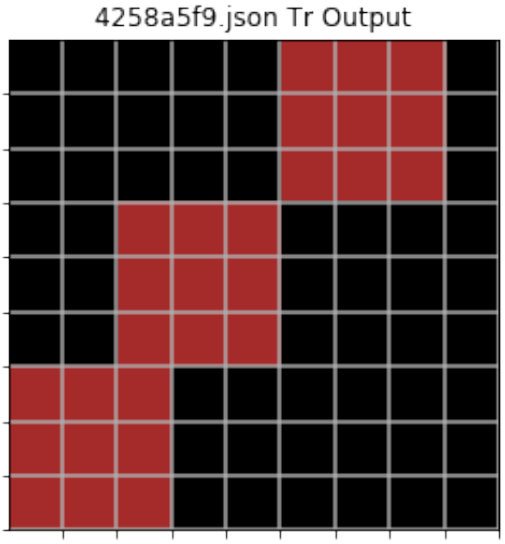
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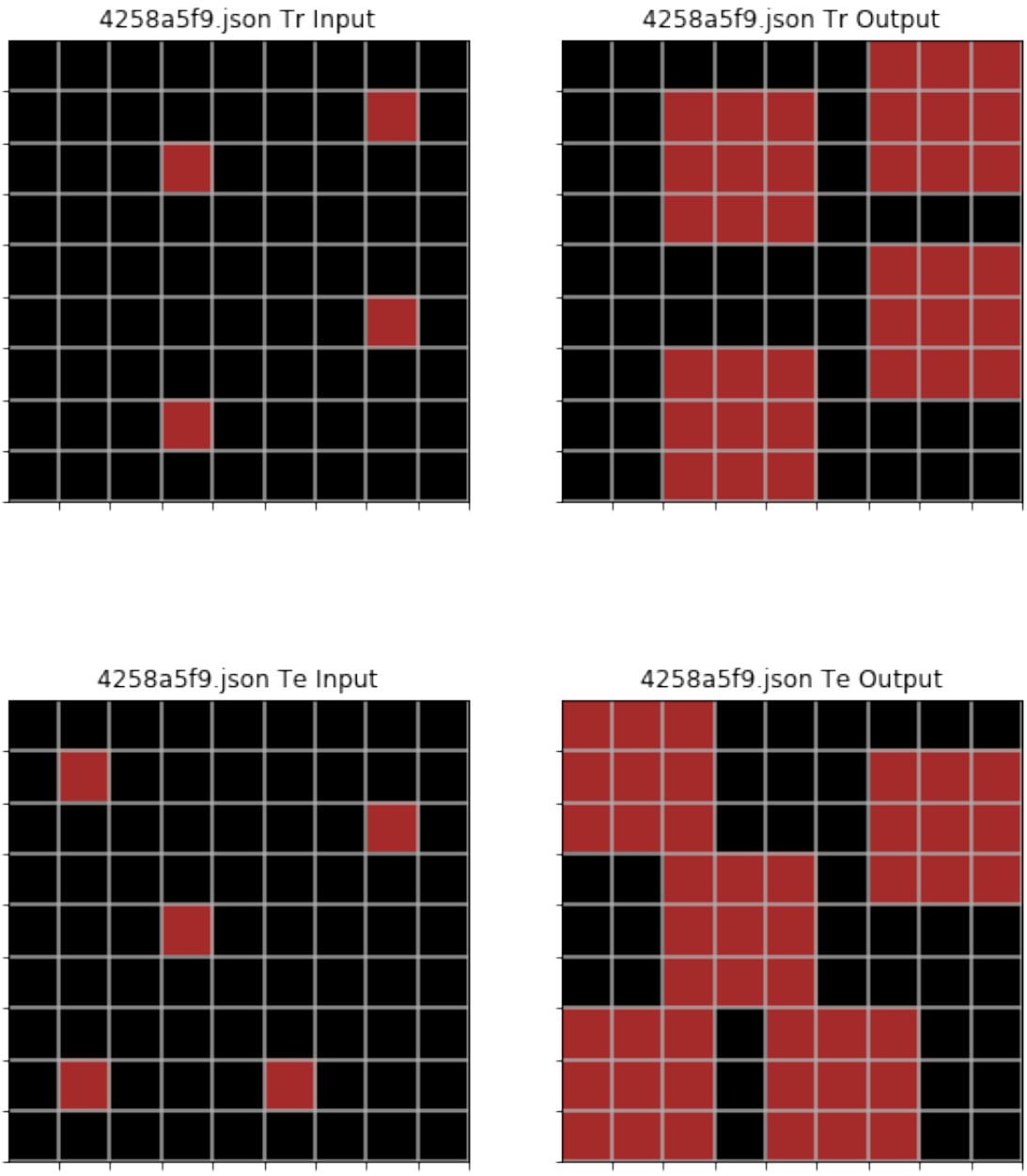
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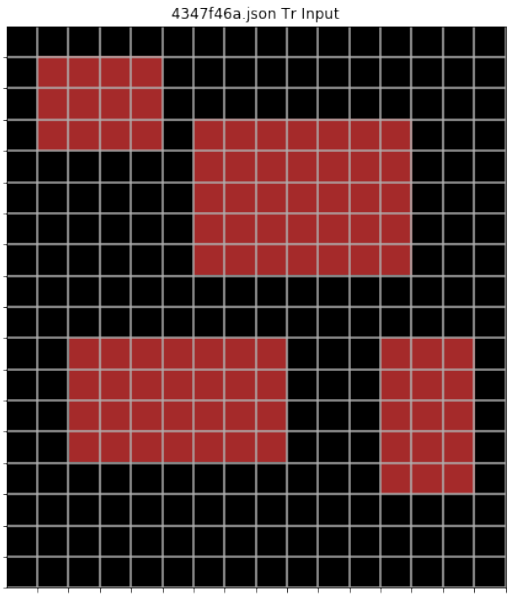
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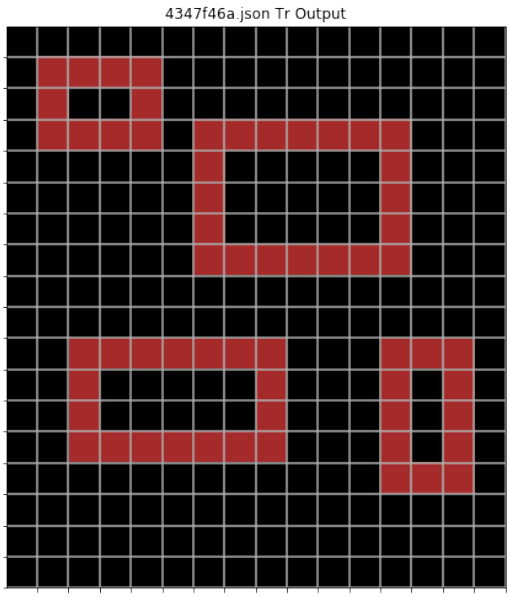
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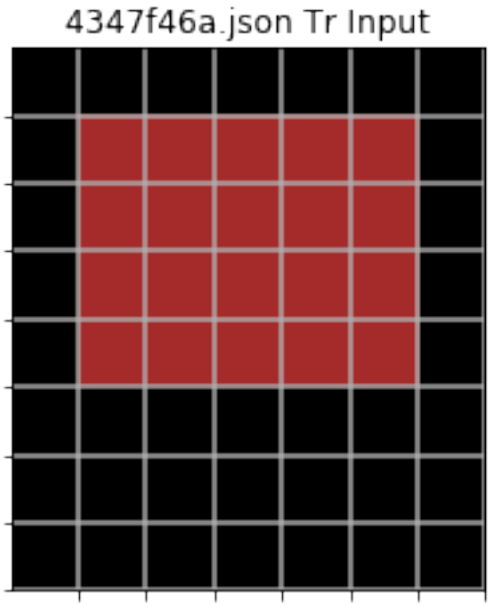
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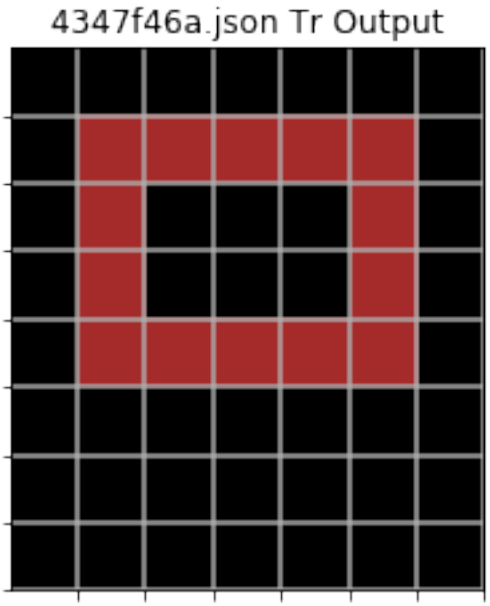
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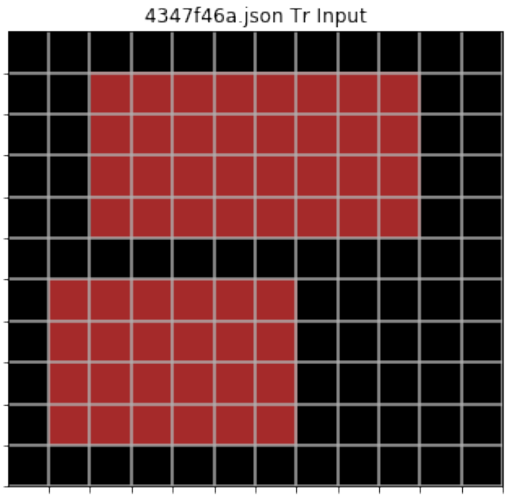
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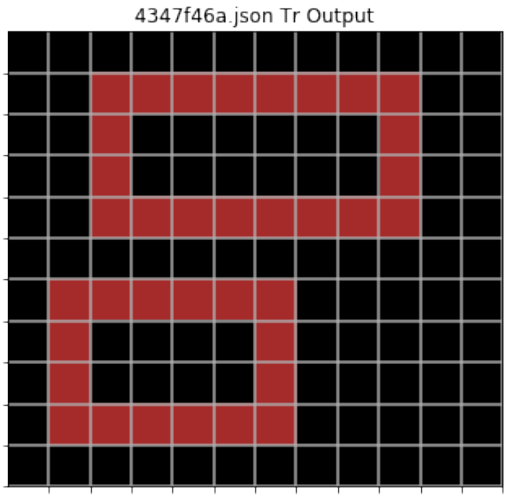
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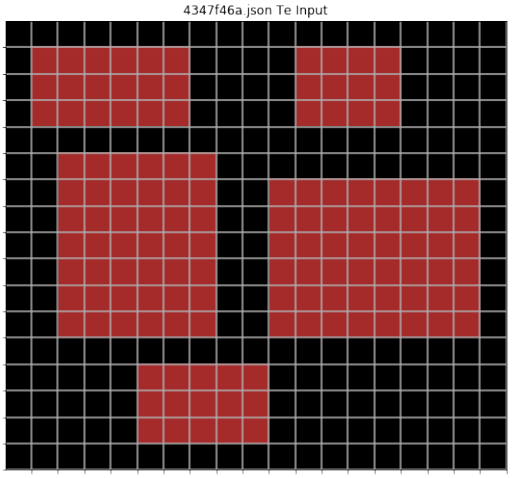
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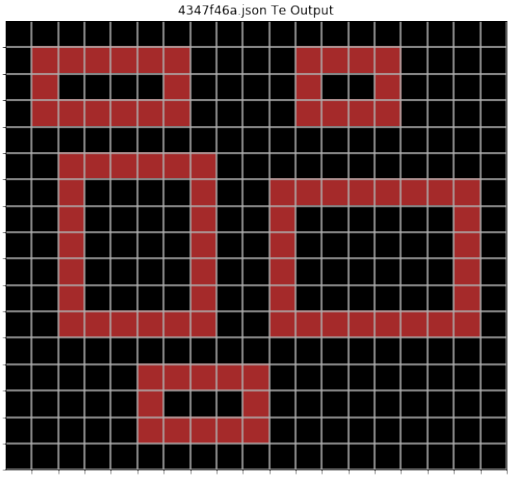
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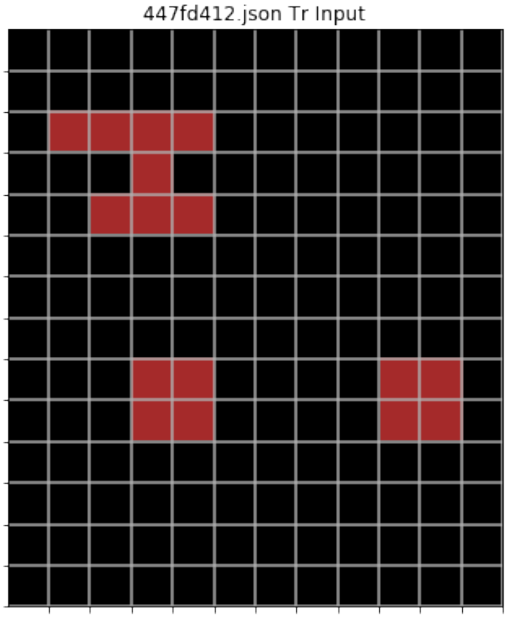

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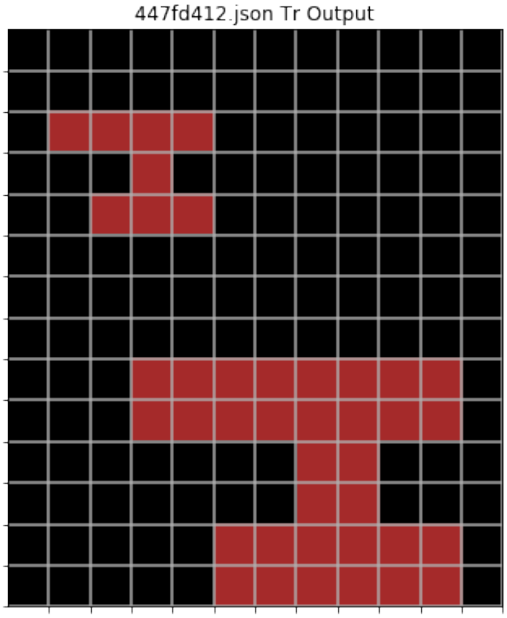

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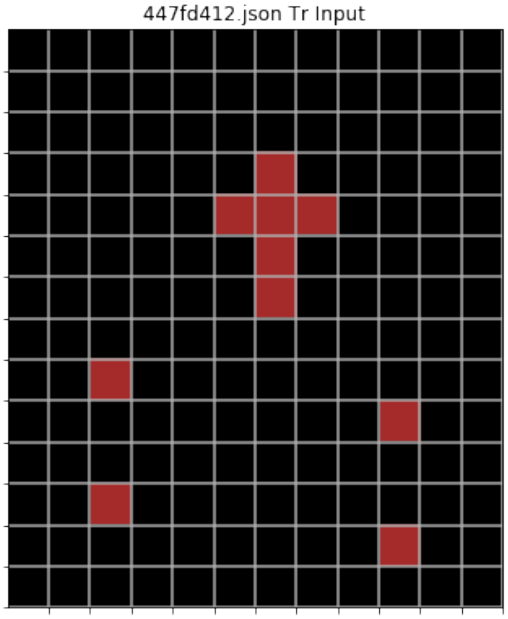

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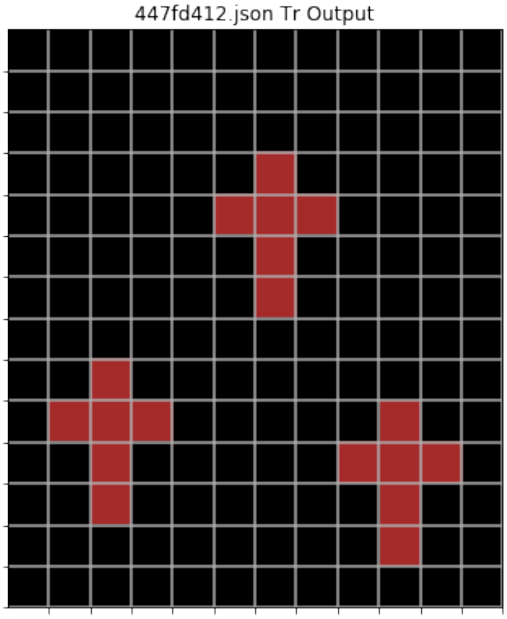

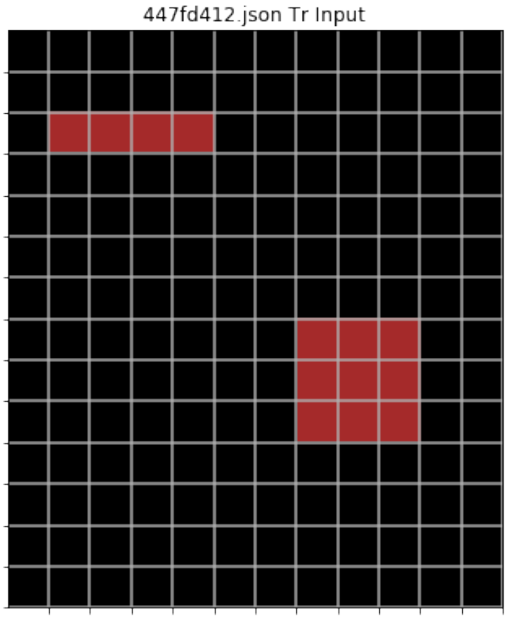
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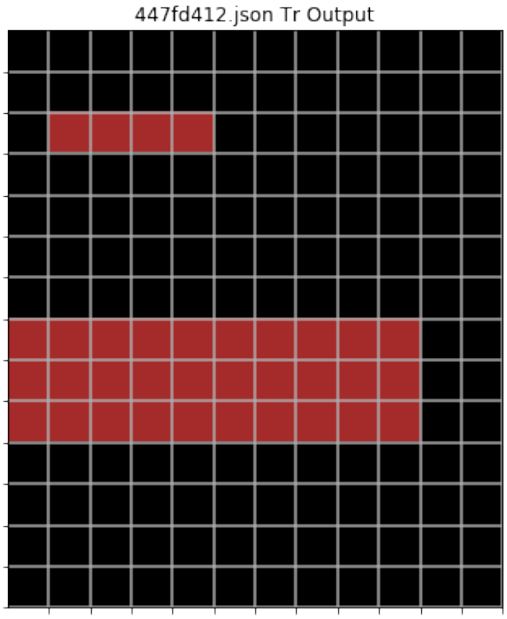
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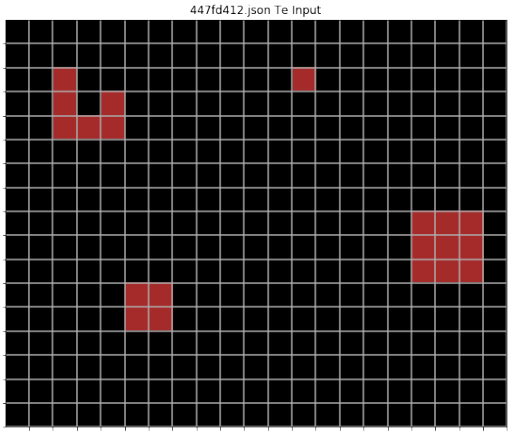
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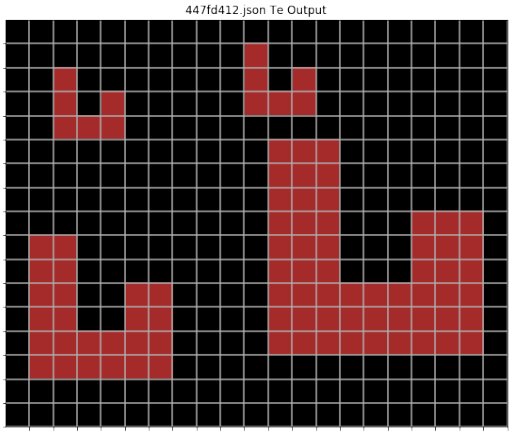
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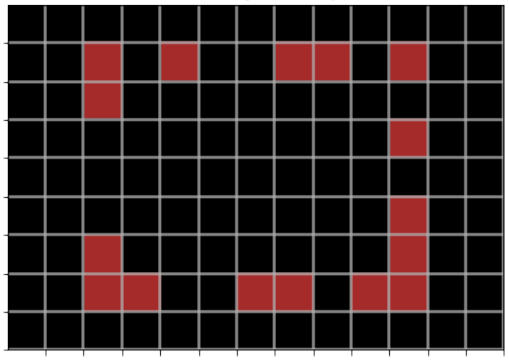

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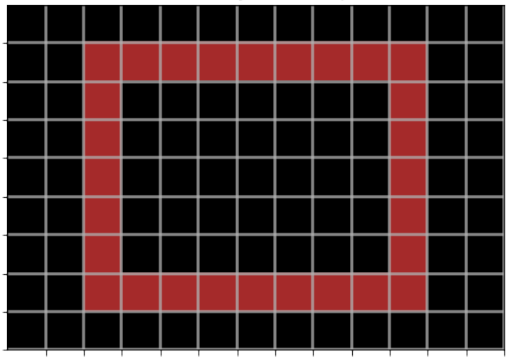

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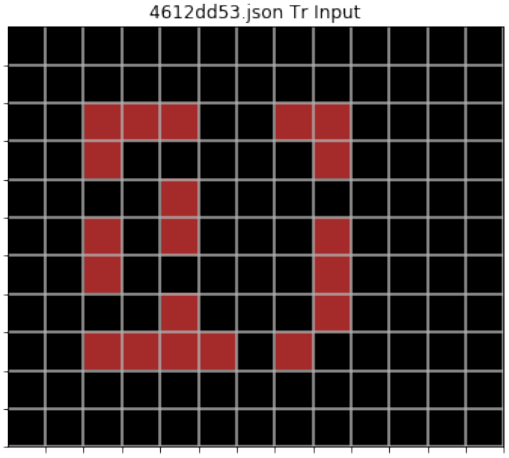

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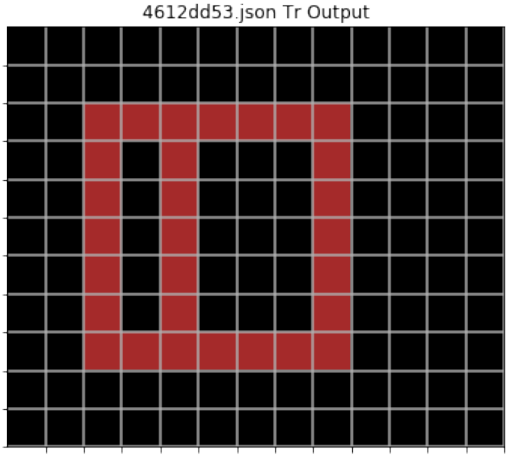

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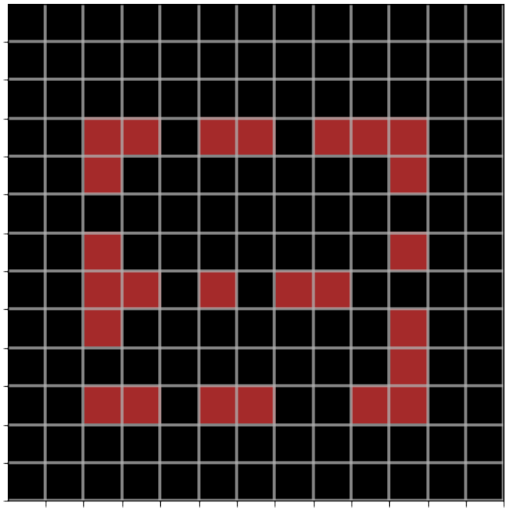

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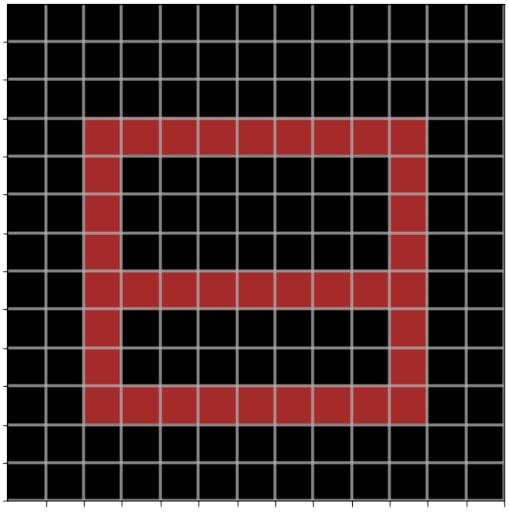

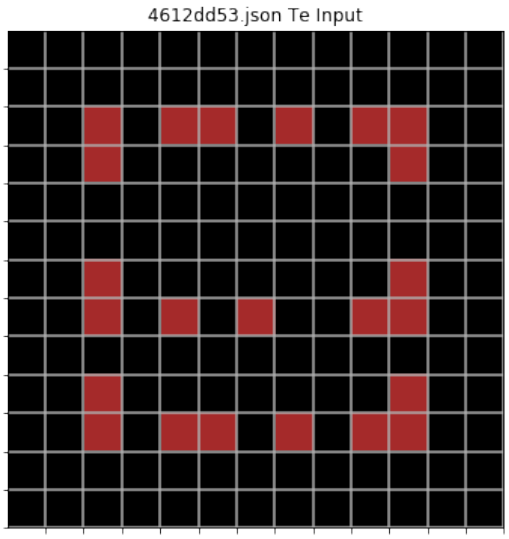
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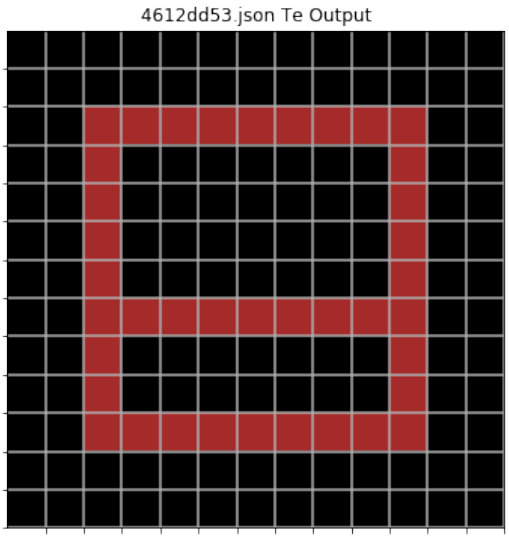
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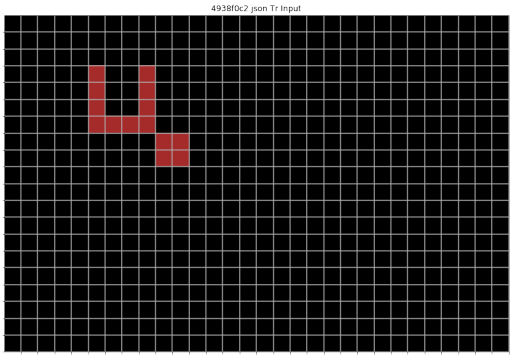
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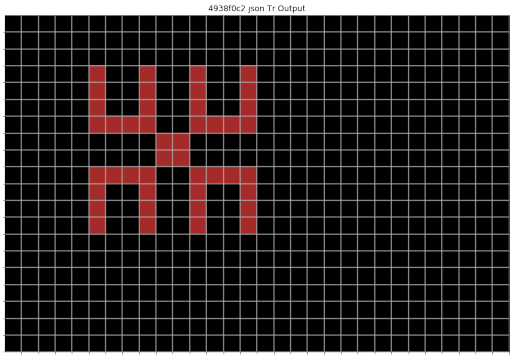
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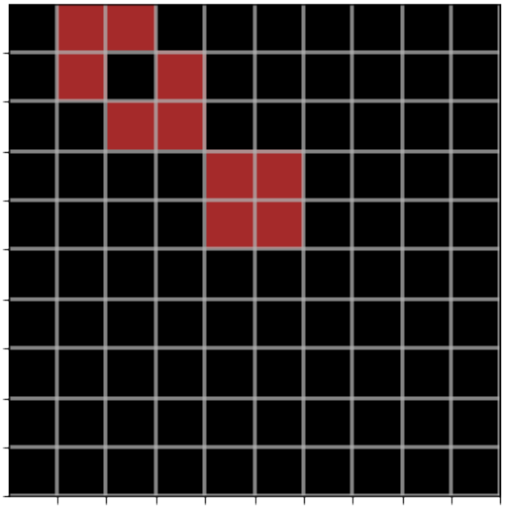

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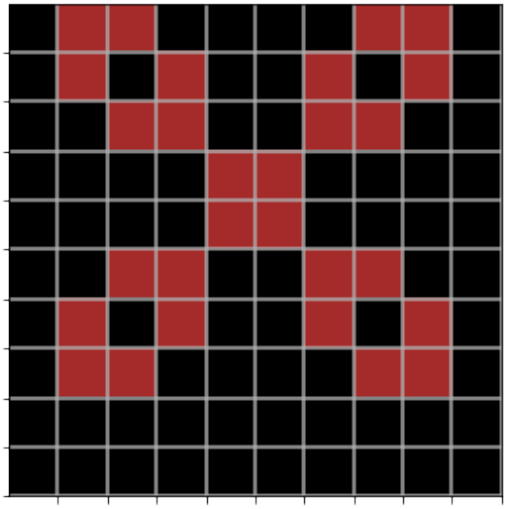

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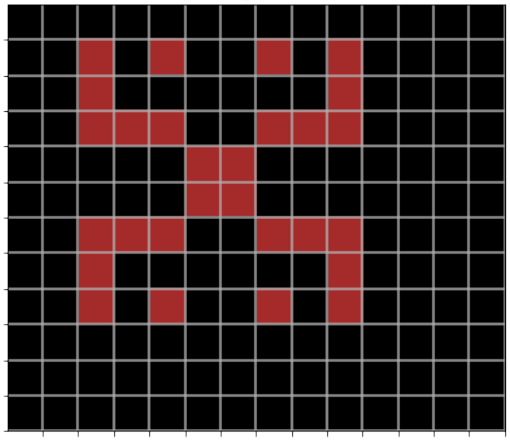

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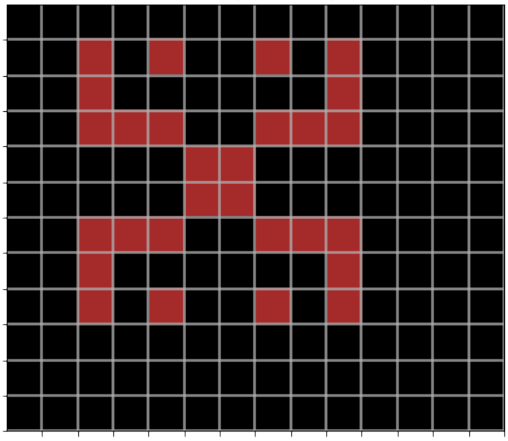

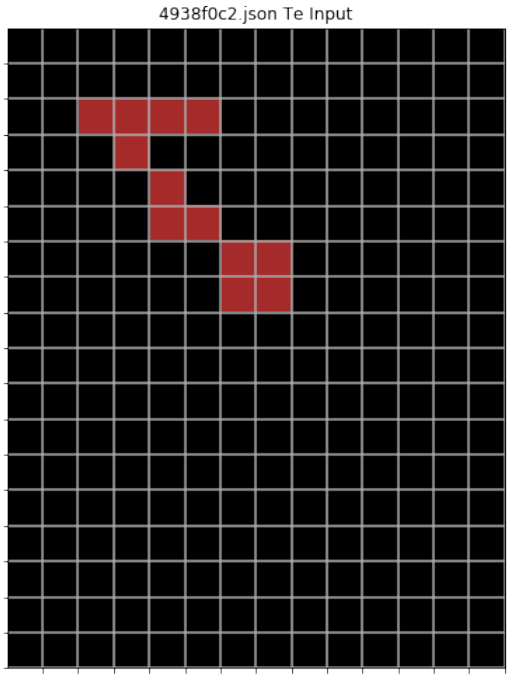
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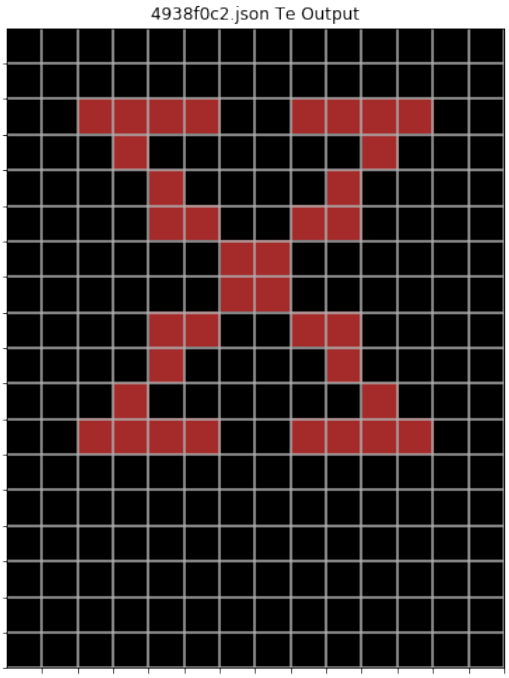
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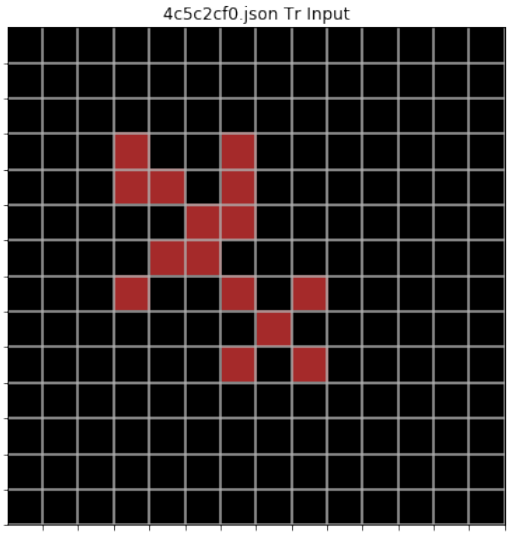
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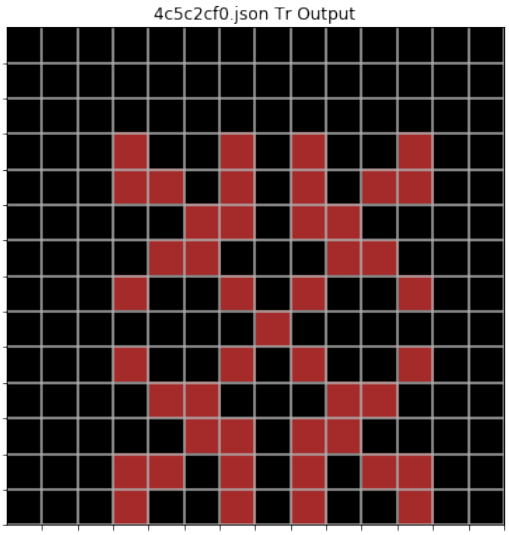
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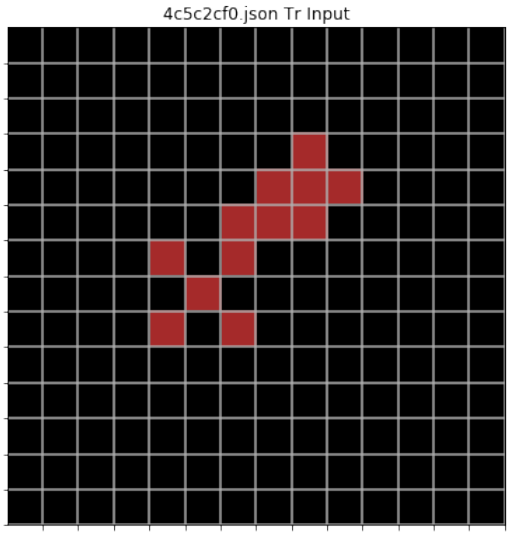
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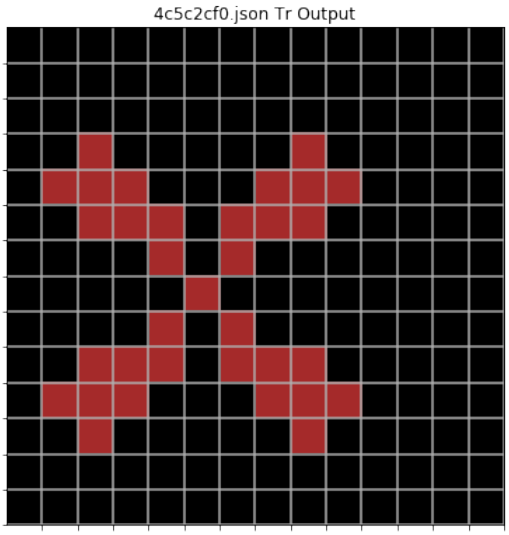
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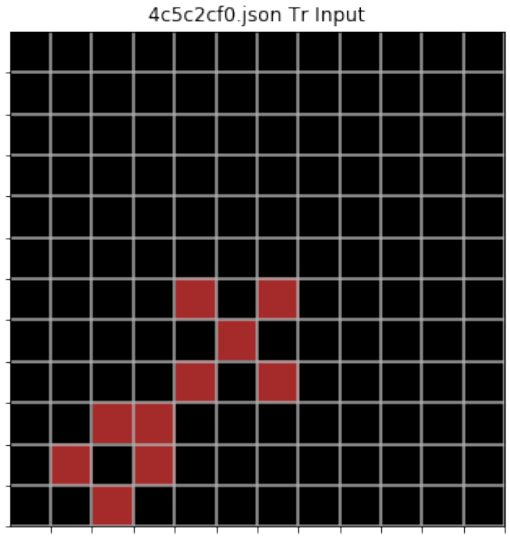
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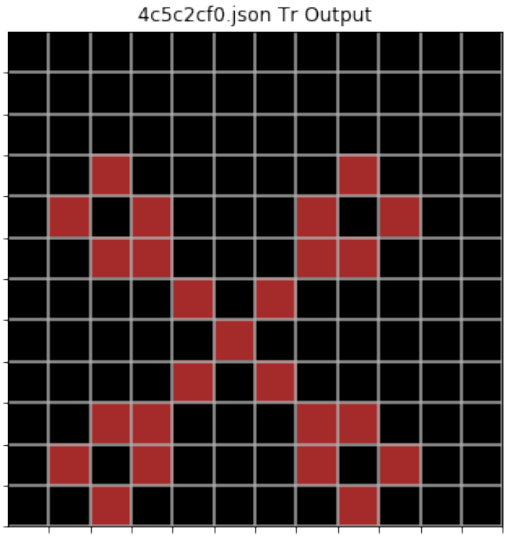
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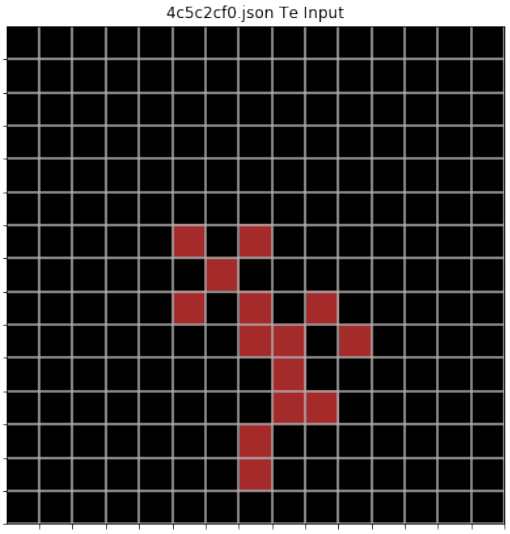
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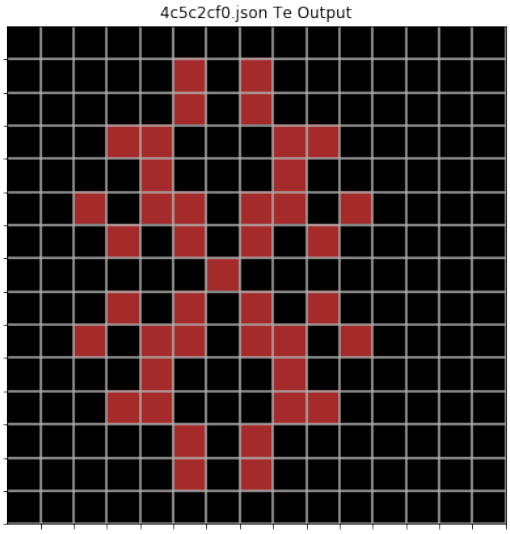
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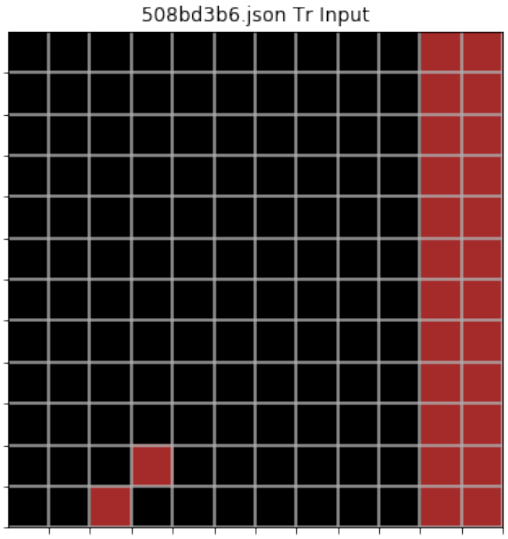
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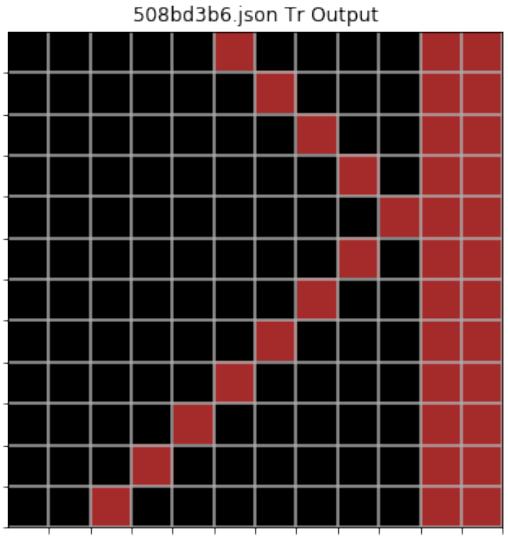
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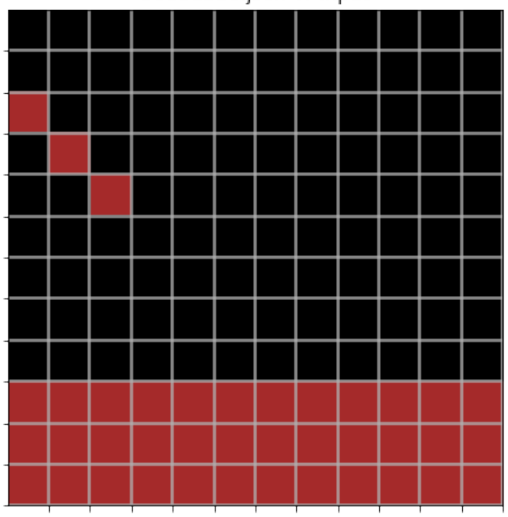

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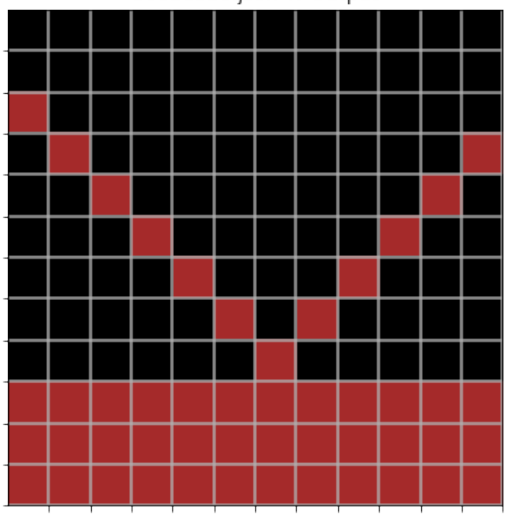

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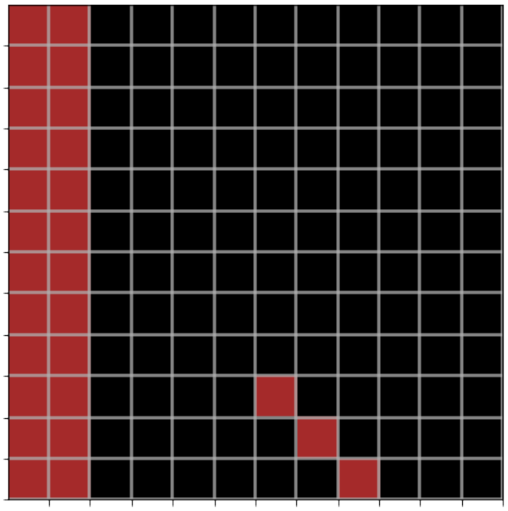

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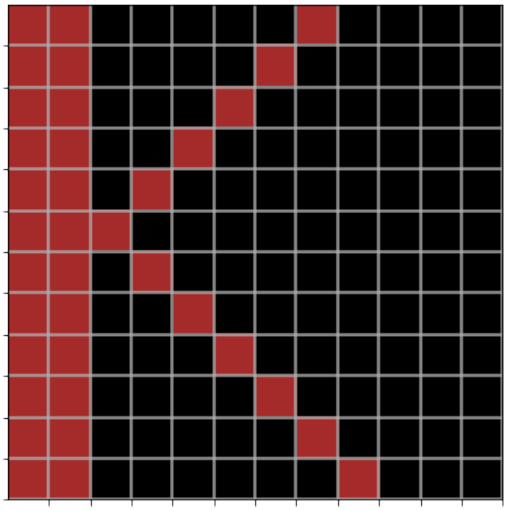

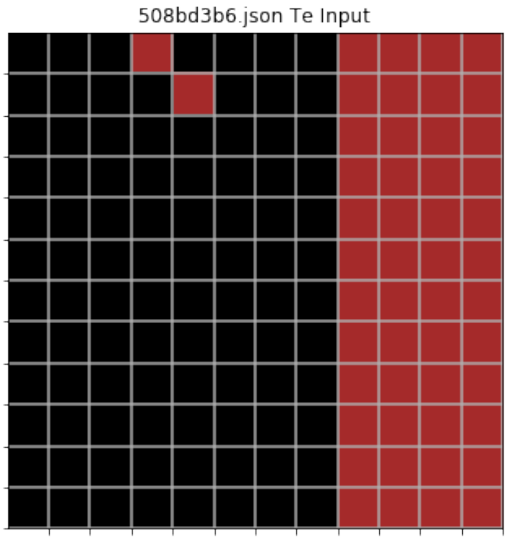
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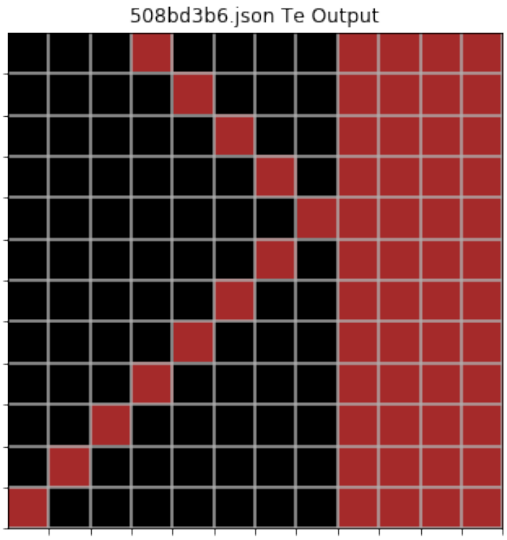
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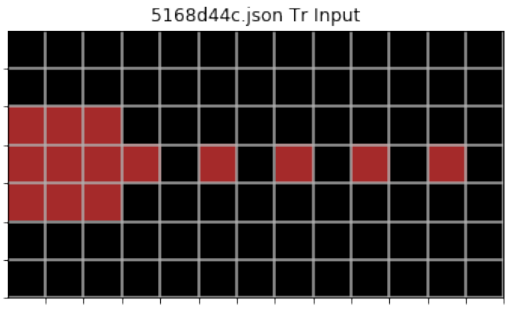
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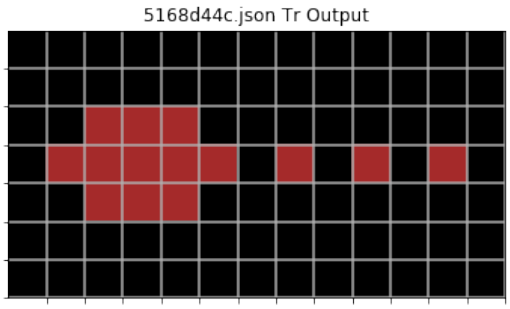
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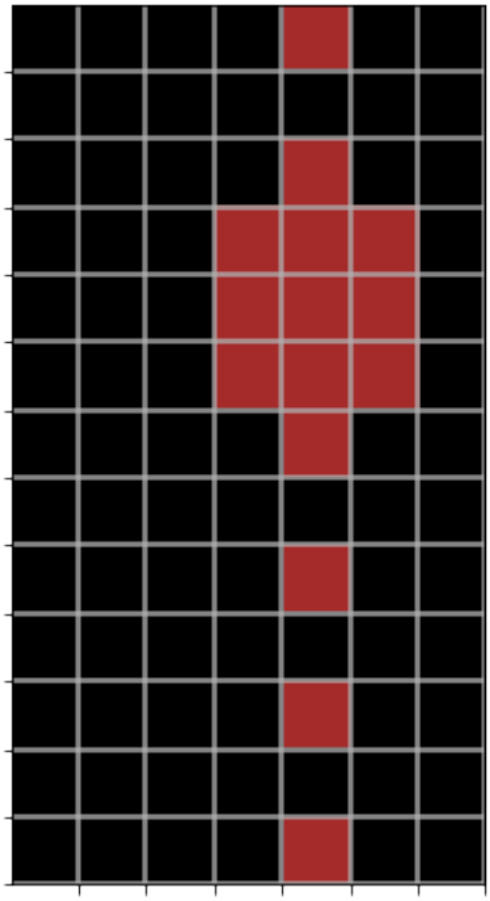

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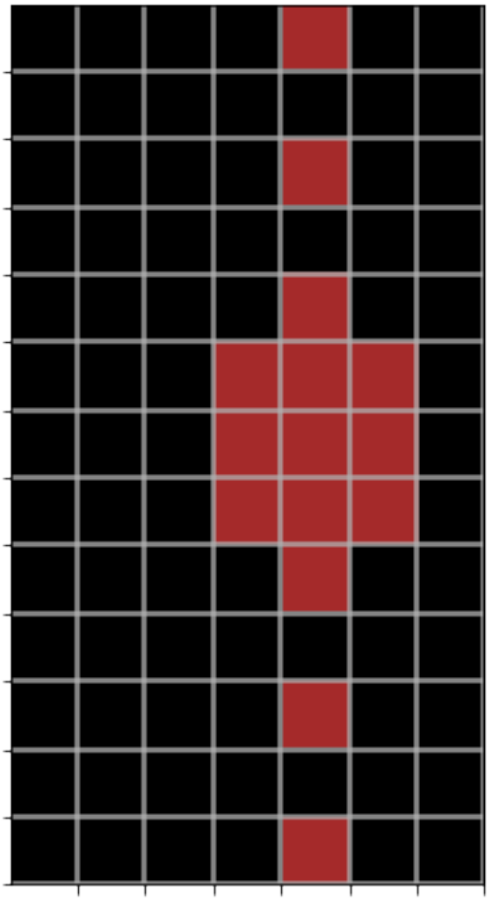

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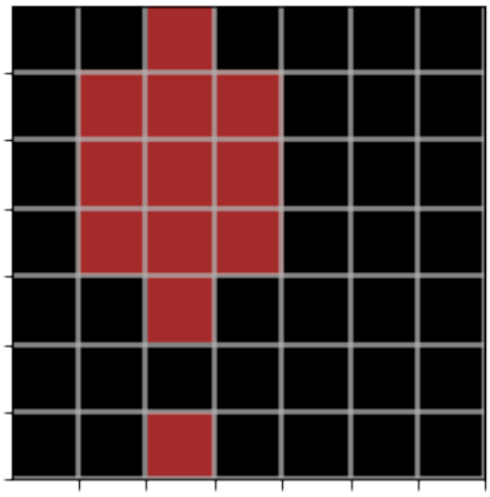

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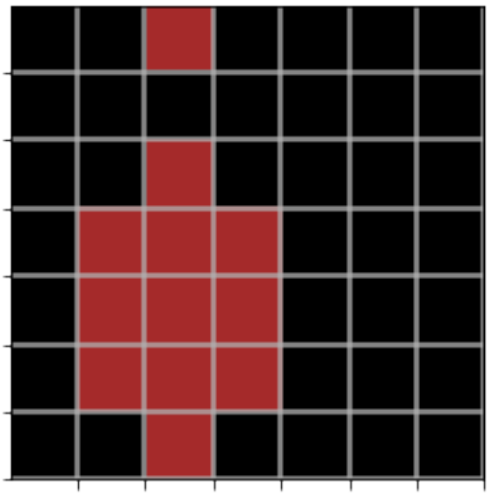

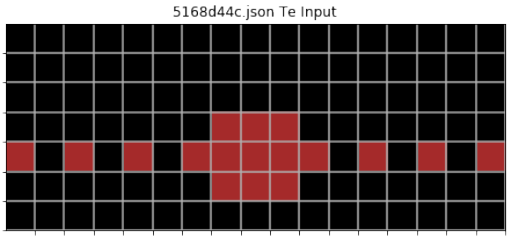
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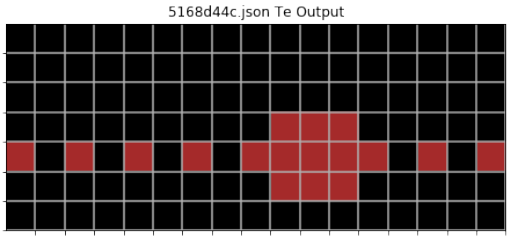
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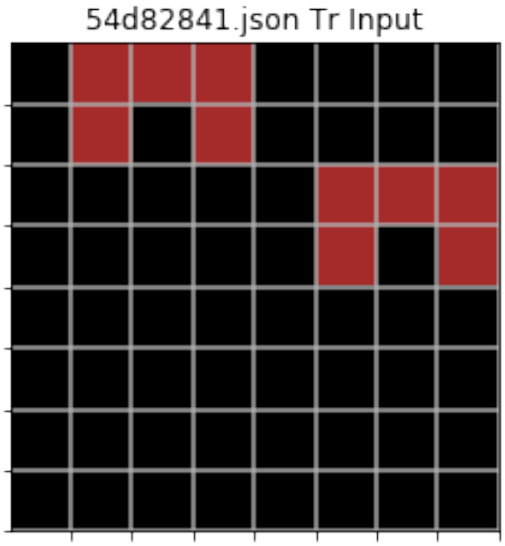
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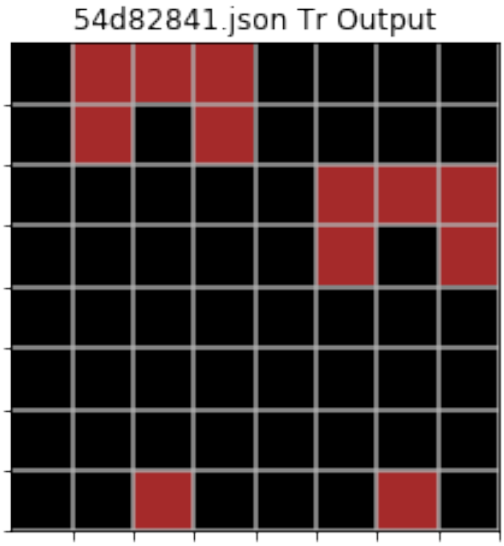
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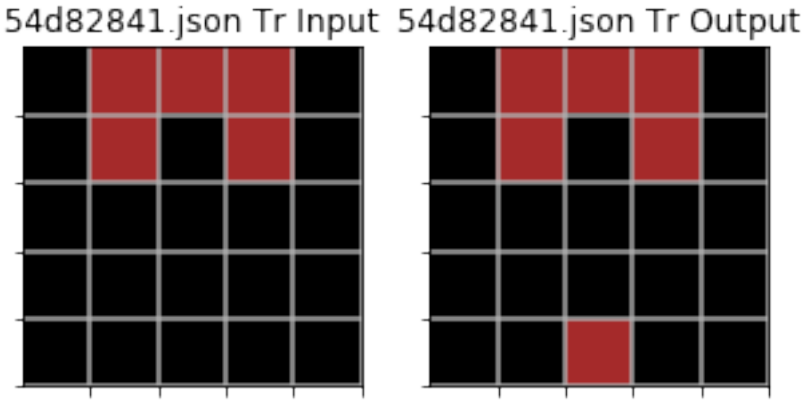
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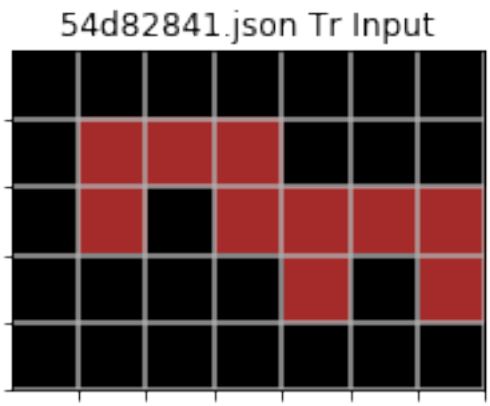
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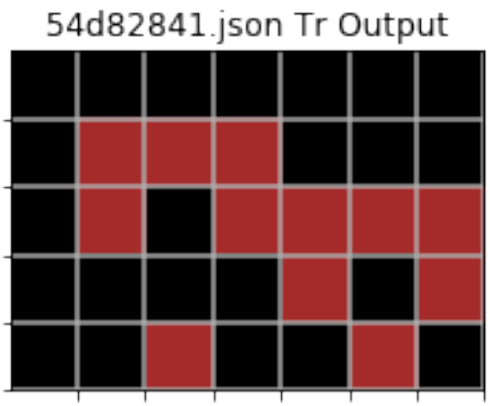
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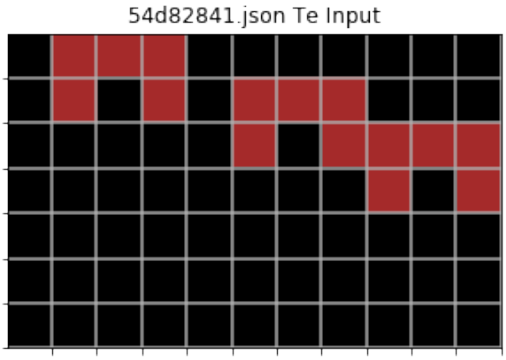
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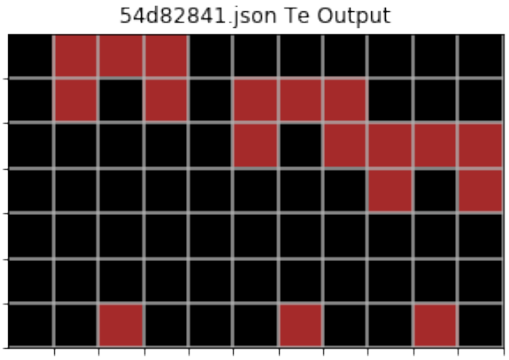
54d82841.json Te Output

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i = 34
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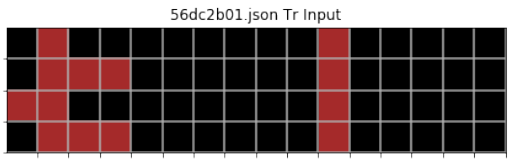
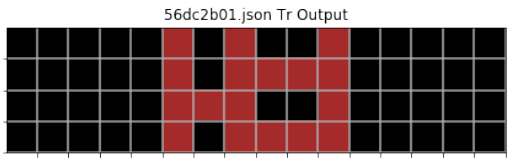
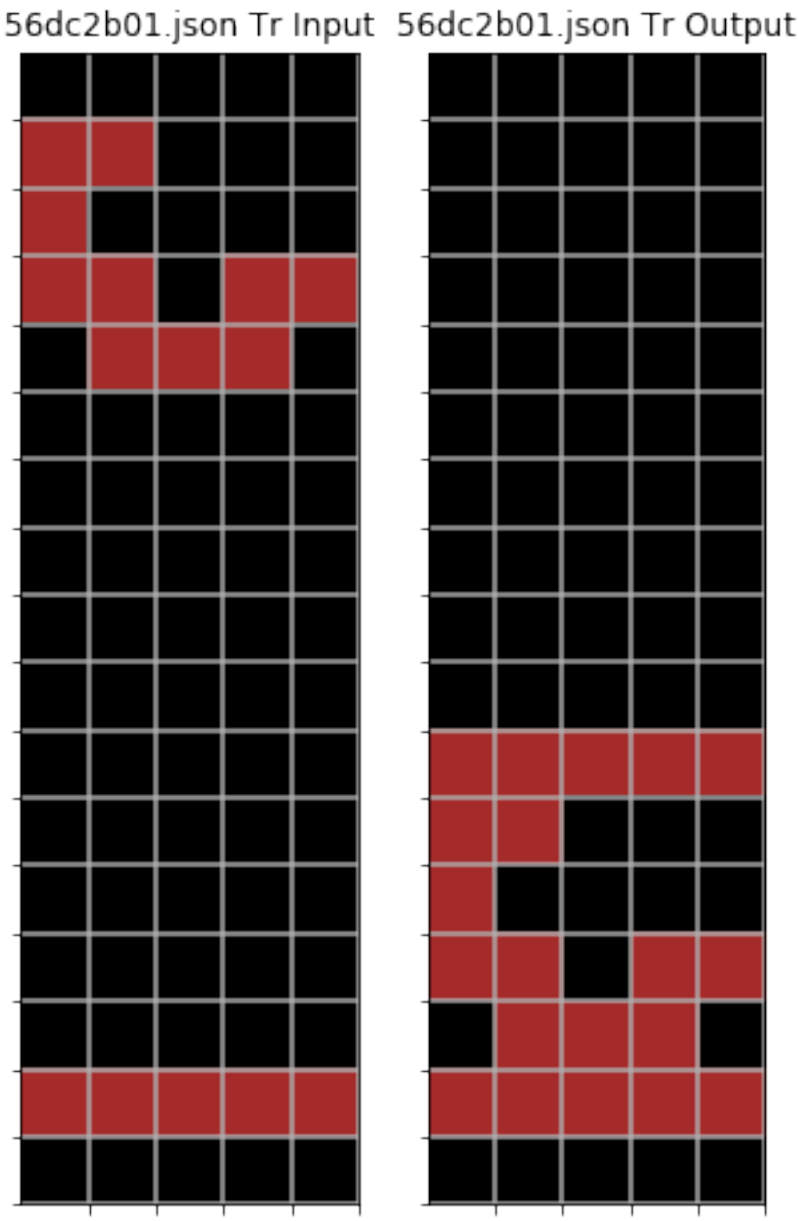
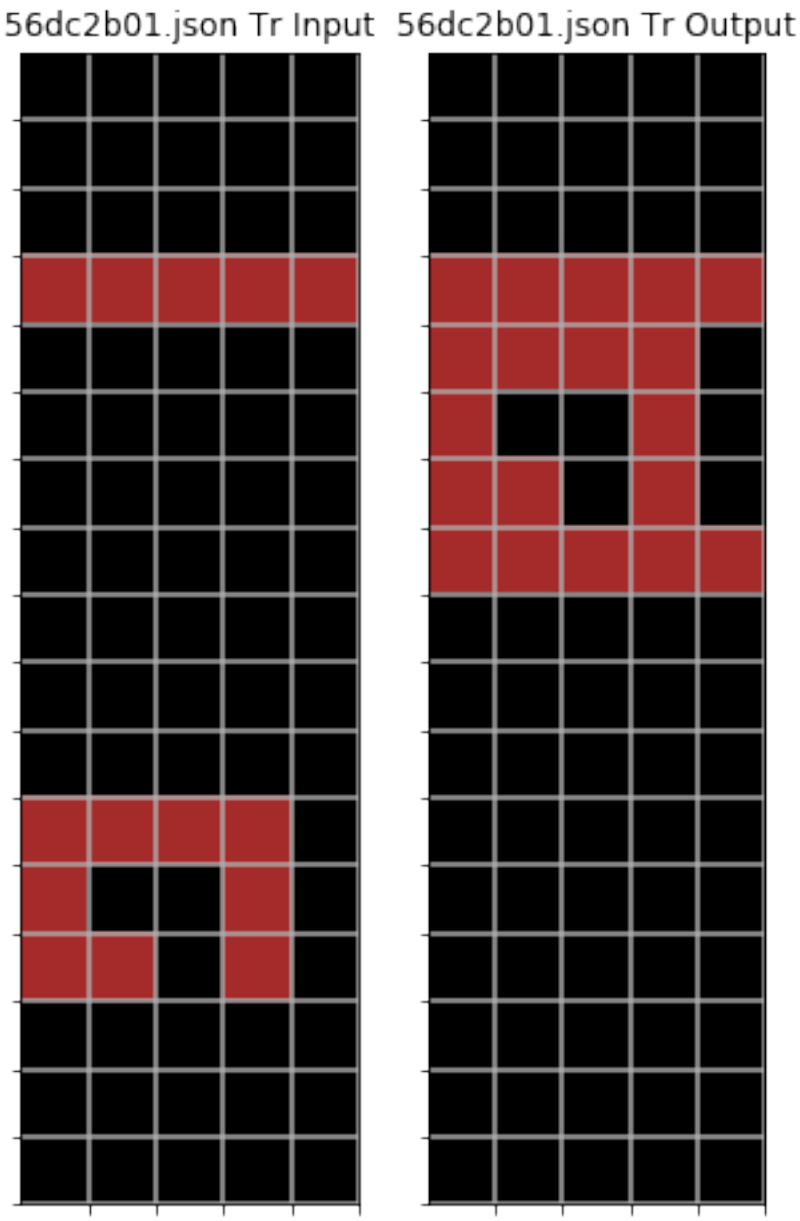

56dc2b01.json Tr Input


56dc2b01.json Tr Output


56dc2b01.json Tr Input
56dc2b01.json Tr Output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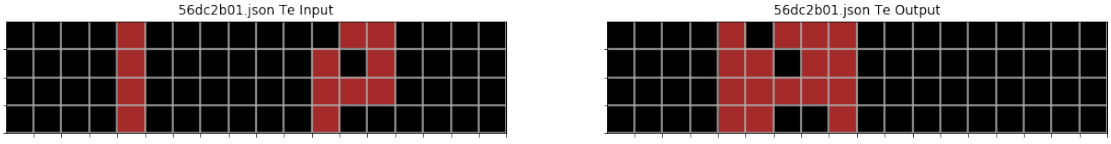
56dc2b01.json Tr Output


56dc2b01.json Te Input
56dc2b01.json Te Output

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i = 35
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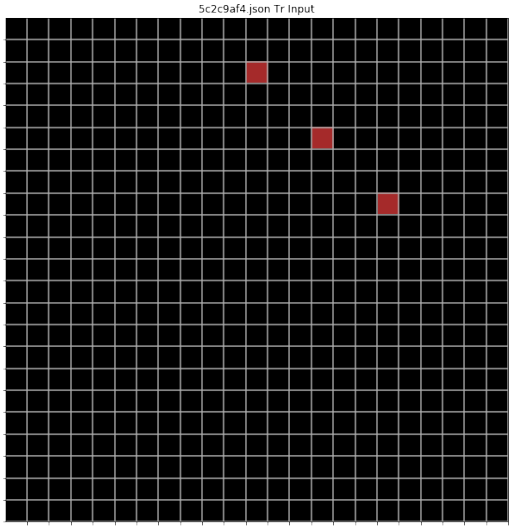
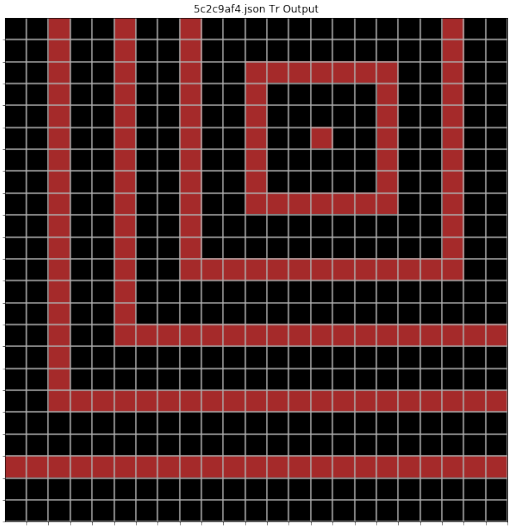
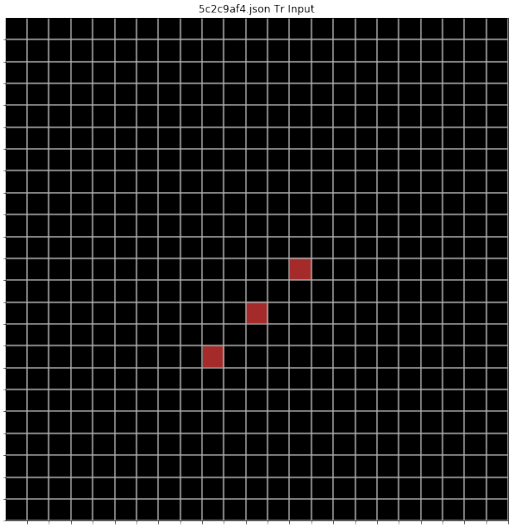
5c2c9af4 json Tr Input



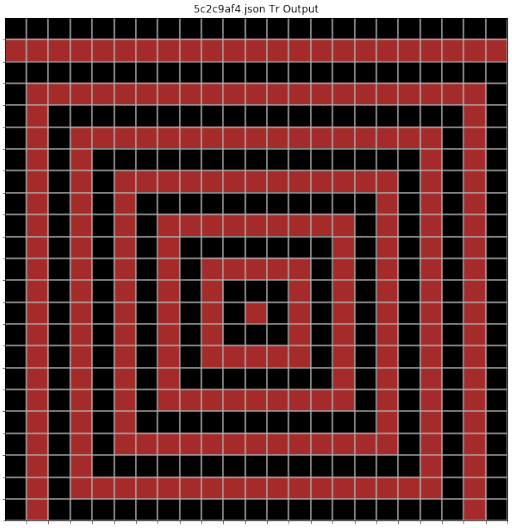
5c2c9af4 json Tr Output

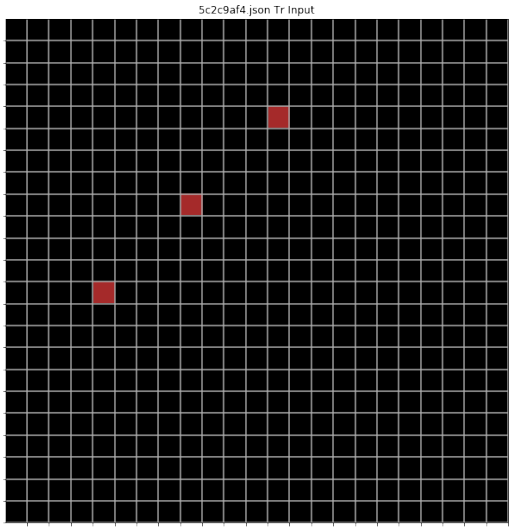


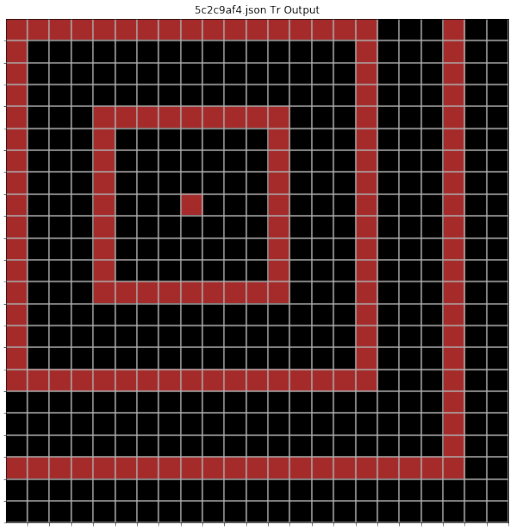
5c2c9af4 json Tr Input

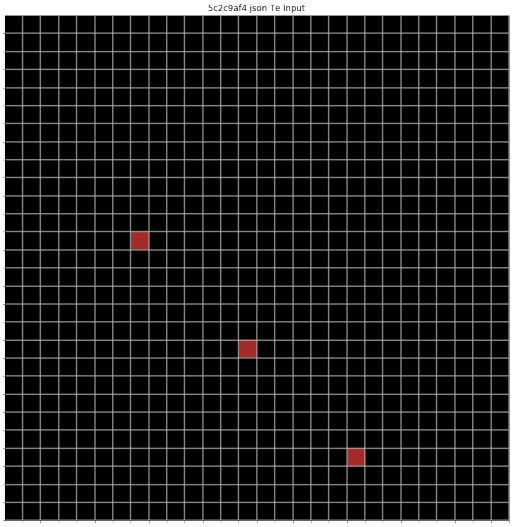


5c2c9af4 json Tr Output




5c2c9af4 json Tr Input


5c2c9af4 json Tr Output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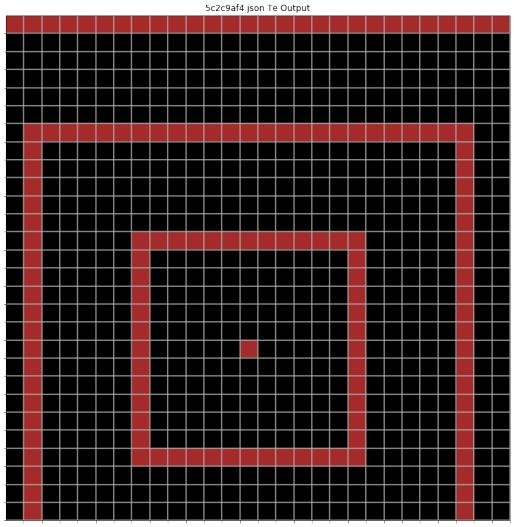
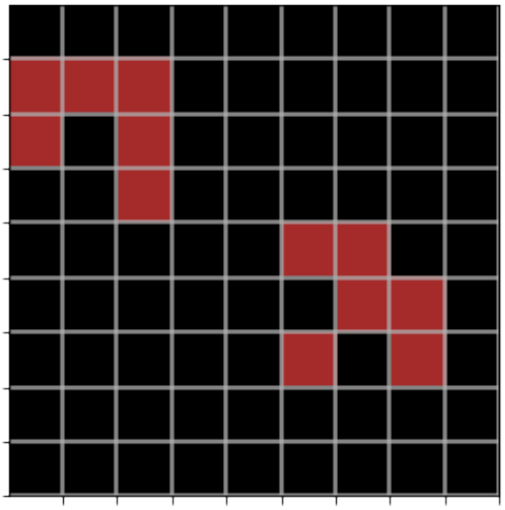
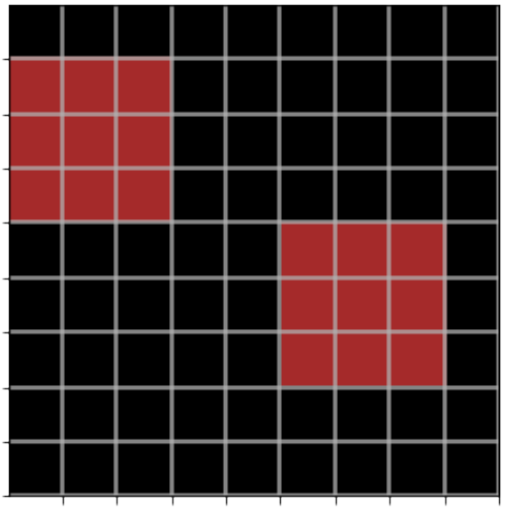

5c2c9af4 json Te Output

i = 36

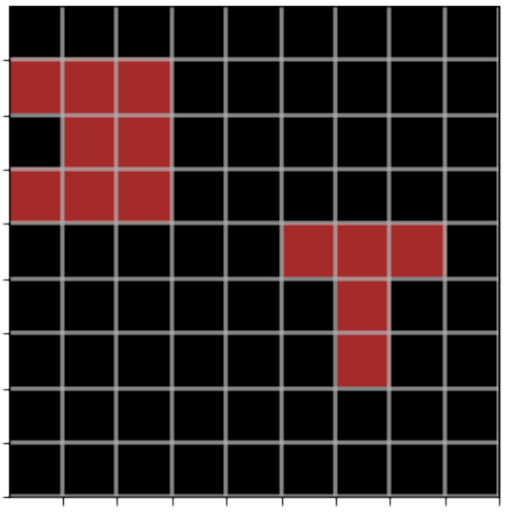
60b61512.json Tr Input



60b61512.json Tr Output



60b61512.json Tr Input



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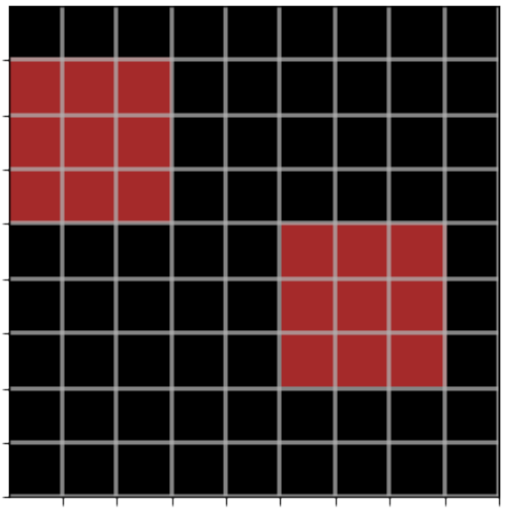

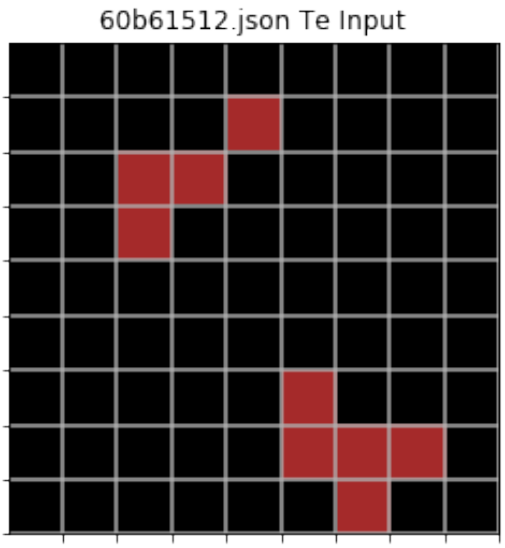
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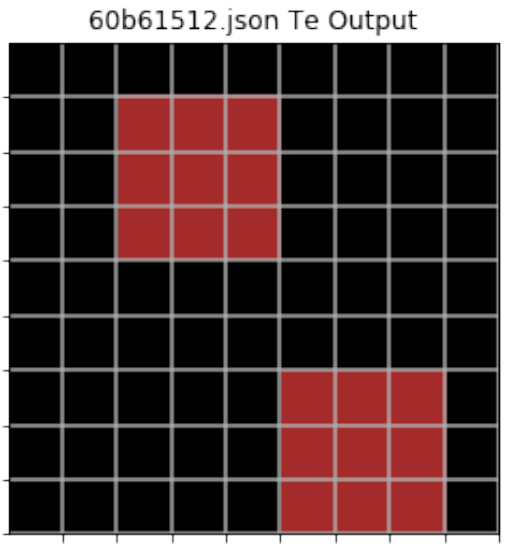
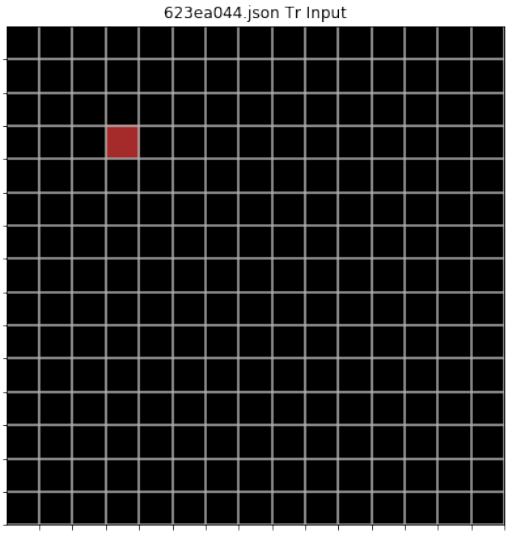
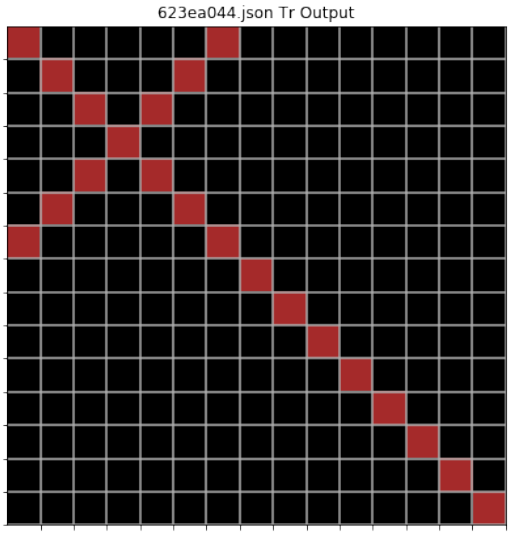
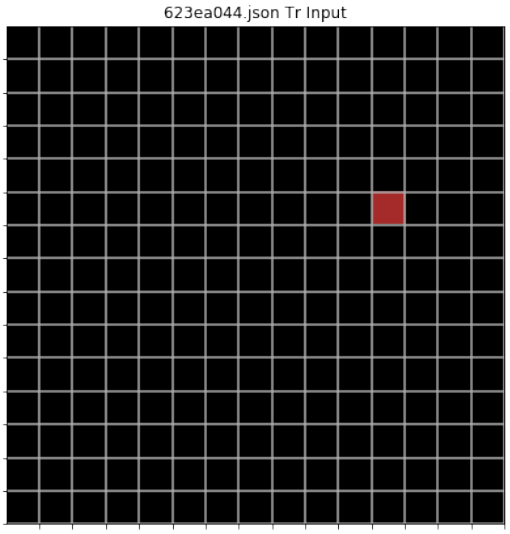
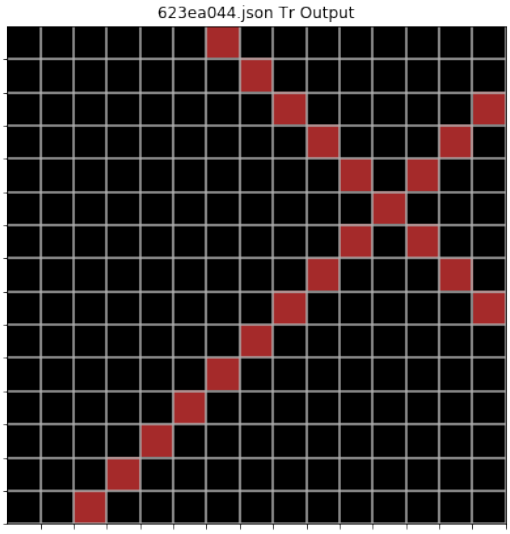

60b61512.json Te Output

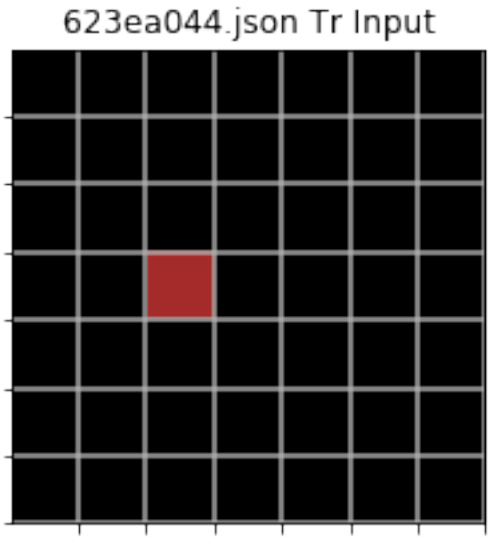
i = 37


623ea044.json Tr Input


623ea044.json Tr Output


623ea044.json Tr Input


623ea044.json Tr Output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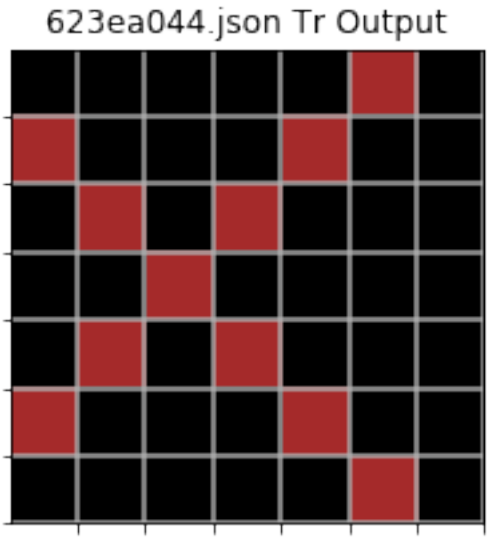
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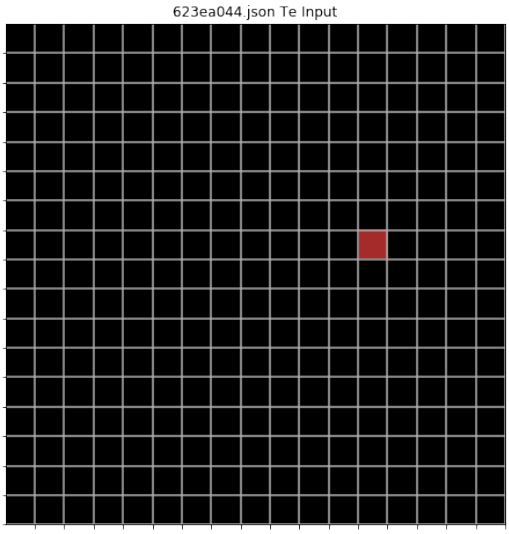

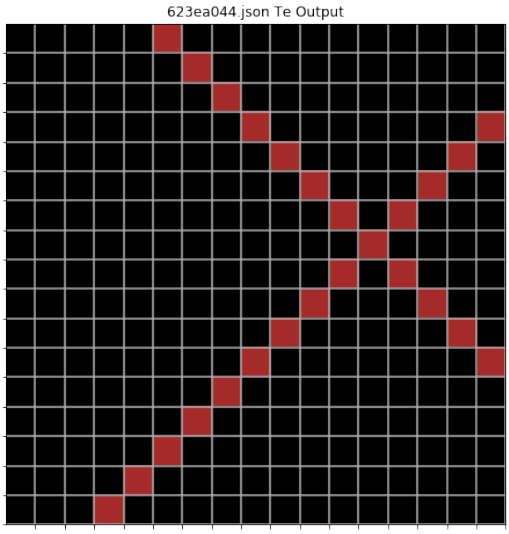


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i = 38
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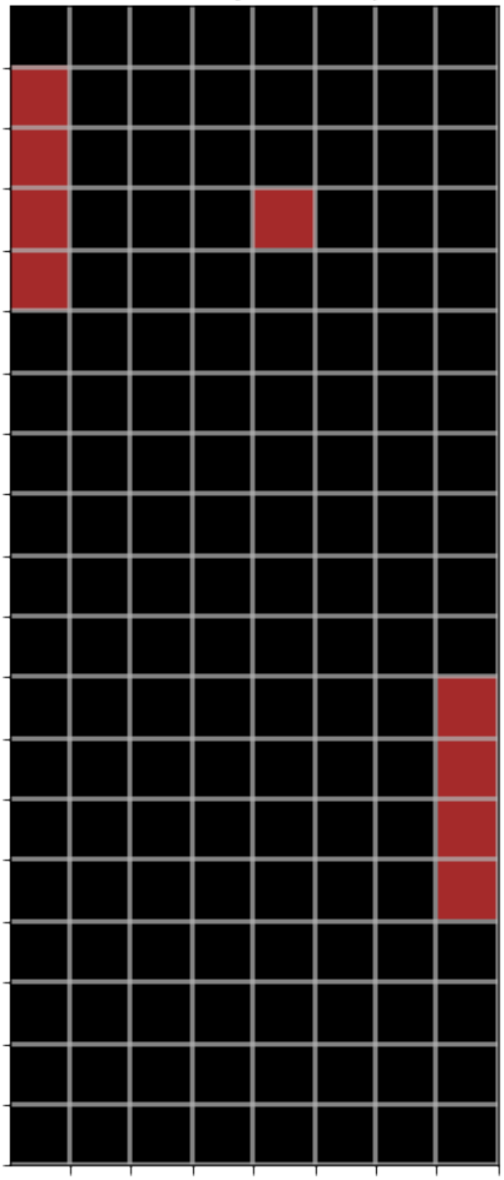
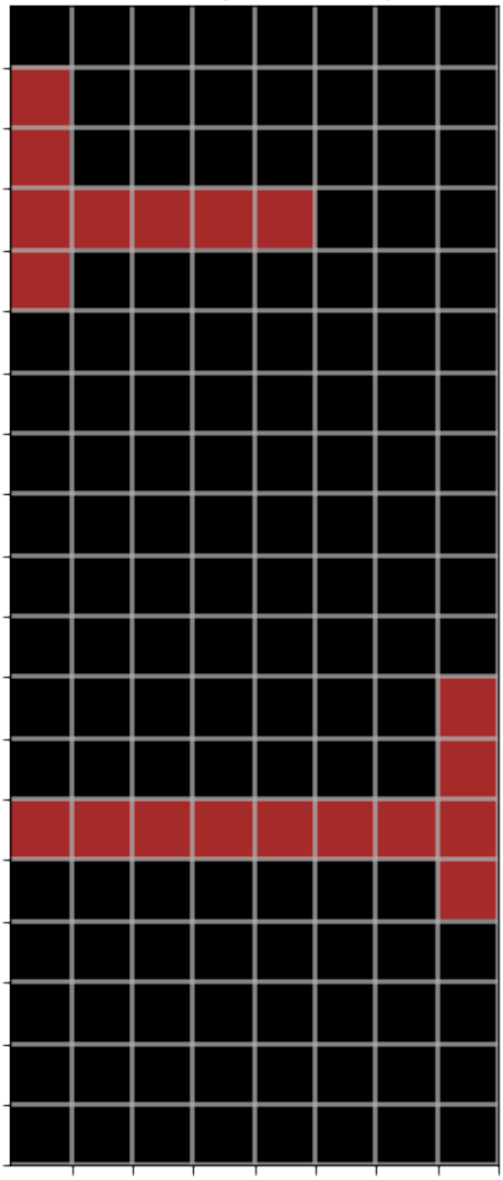
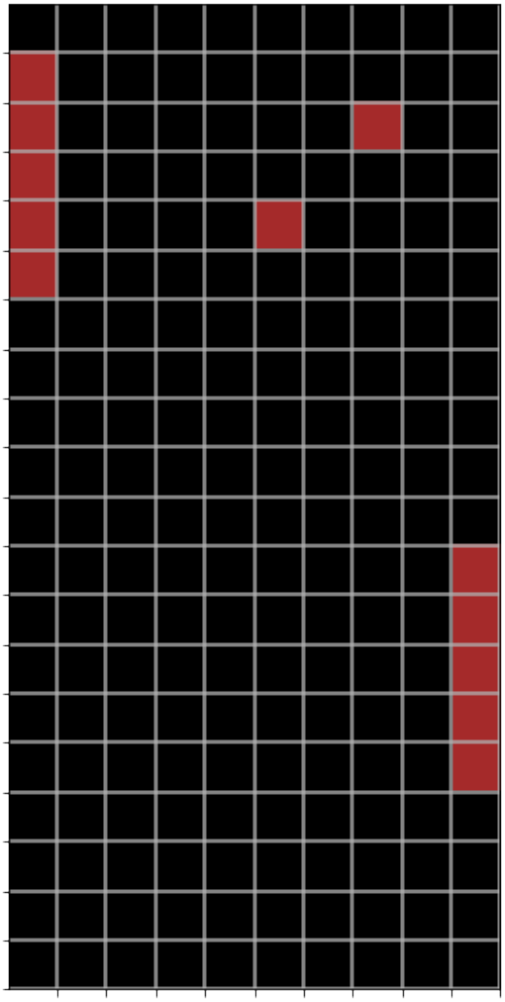
673ef223.json Tr Input



673ef223.json Tr Output



673ef223.json Tr Input



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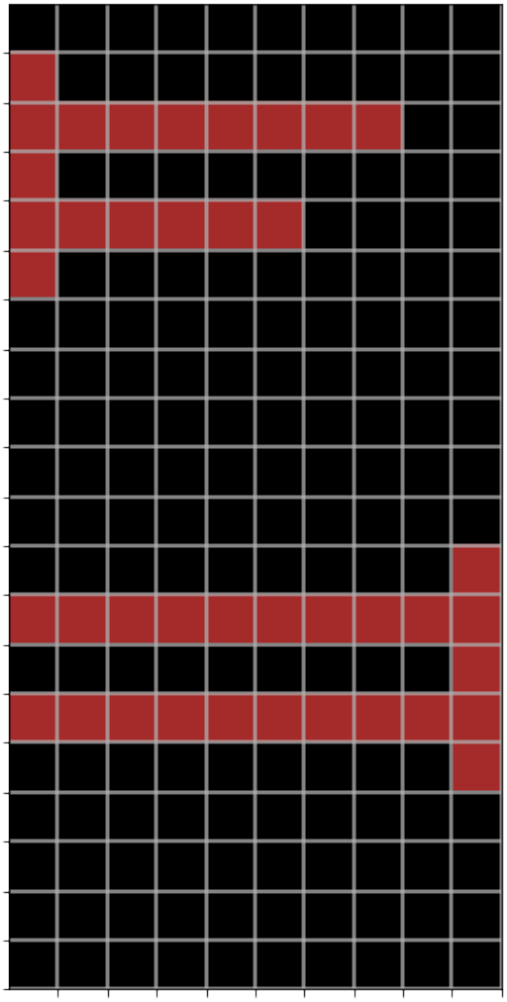

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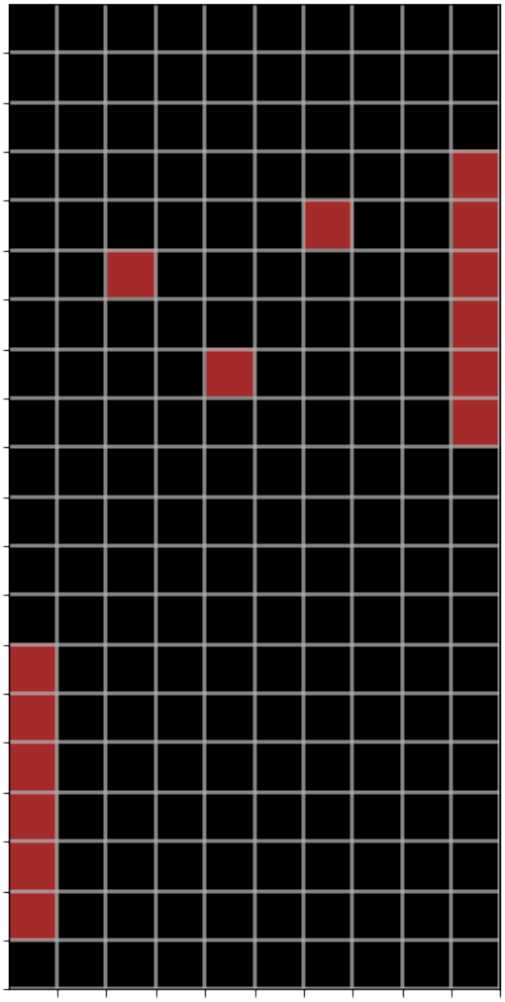
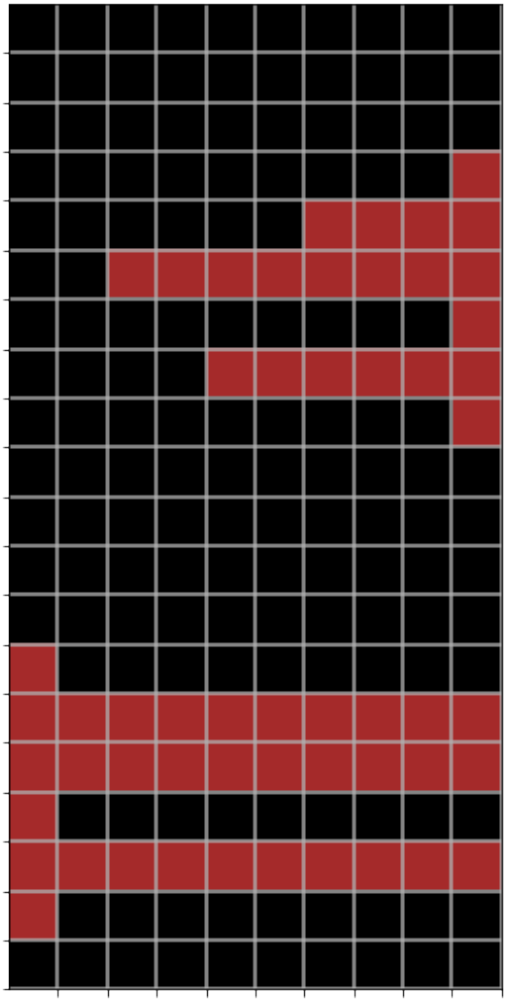
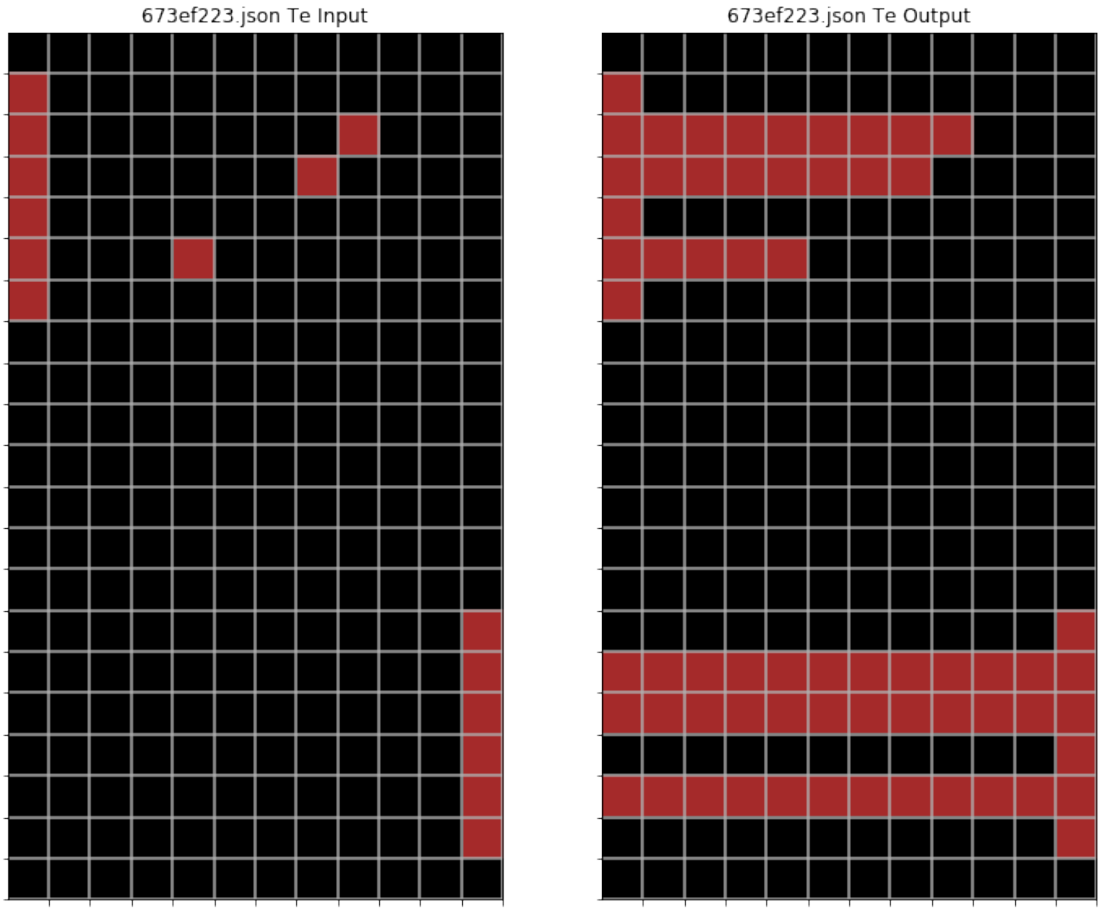


673ef223.json Tr Output




673ef223.json Te Input
673ef223.json Te Output

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i = 39
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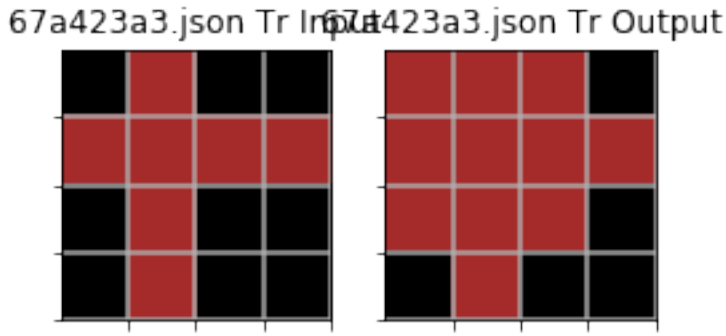
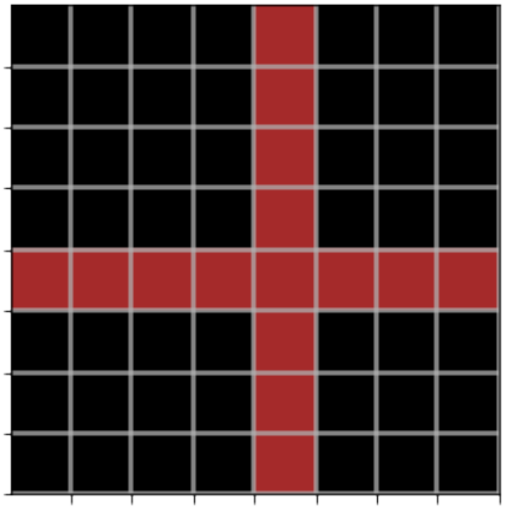
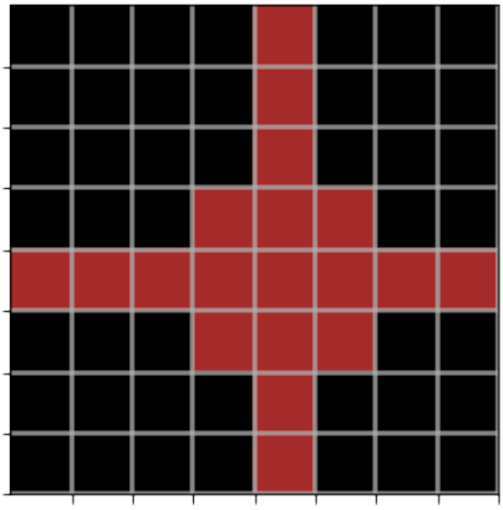

67a423a3.json Tr Input
67a423a3.json Tr Output

67a423a3.json Tr Input



67a423a3.json Tr Output



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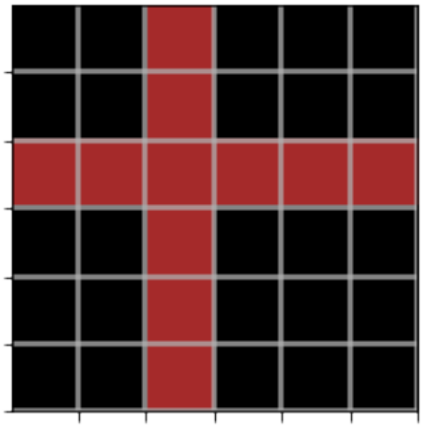
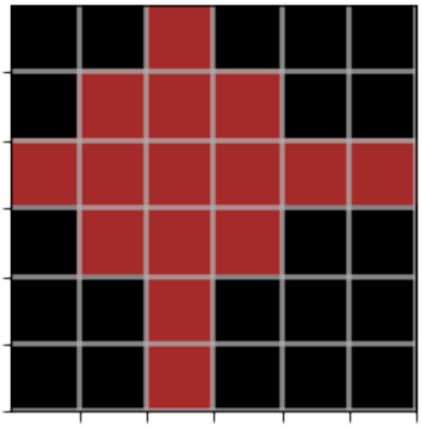
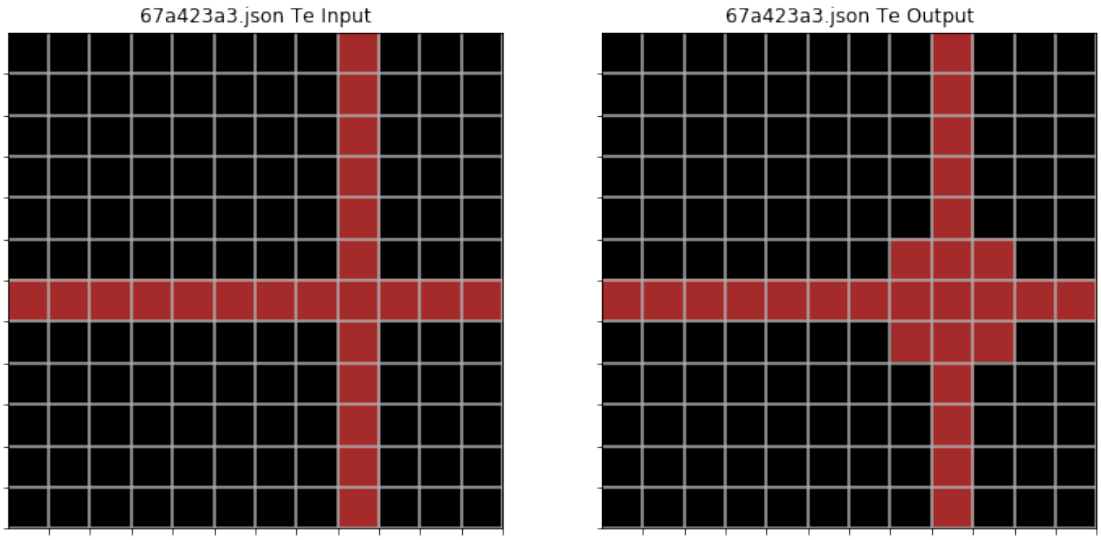


67a423a3.json Tr Output




67a423a3.json Te Input
67a423a3.json Te Output

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i = 40
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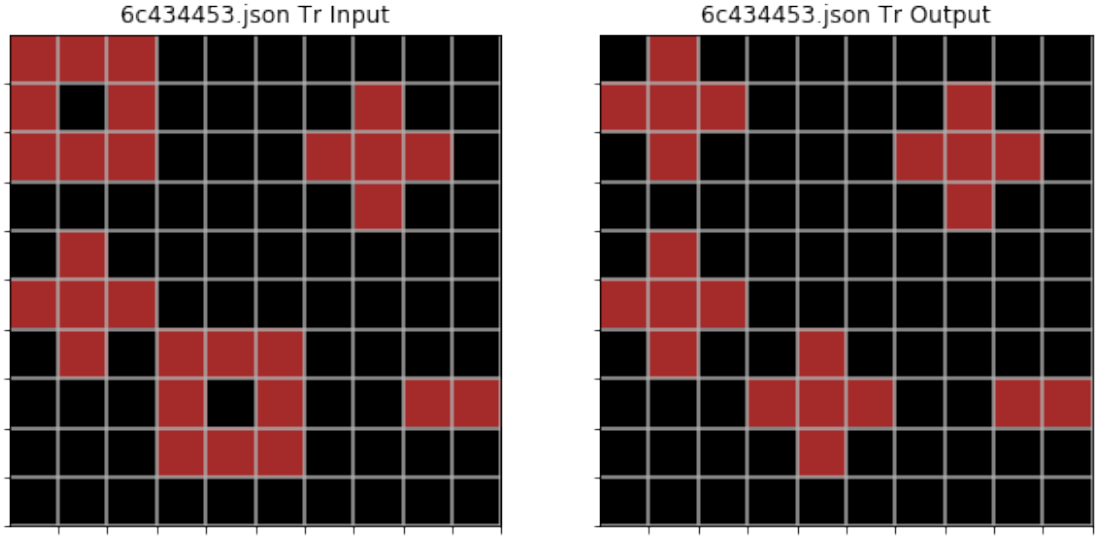
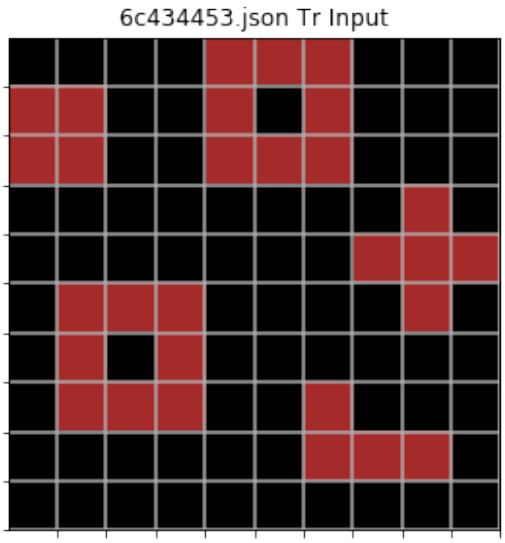
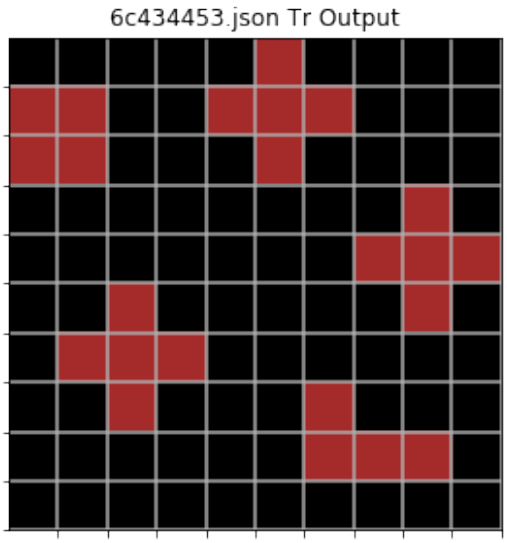

6c434453.json Tr Input
6c434453.json Tr Output


6c434453.json Tr Input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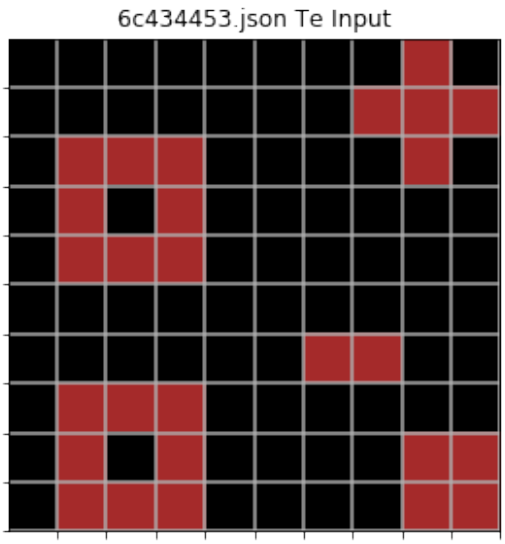
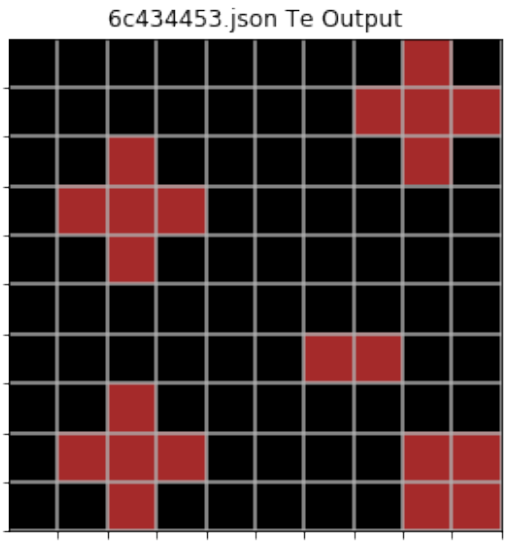

6c434453.json Te Input


6c434453.json Te Output

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i = 41
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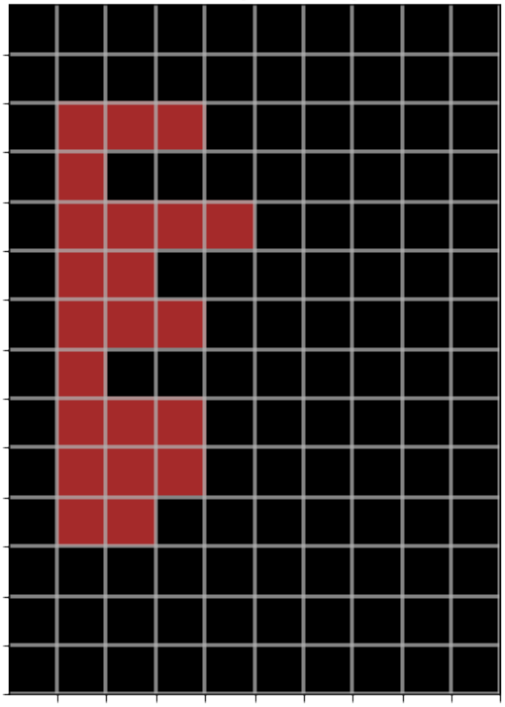
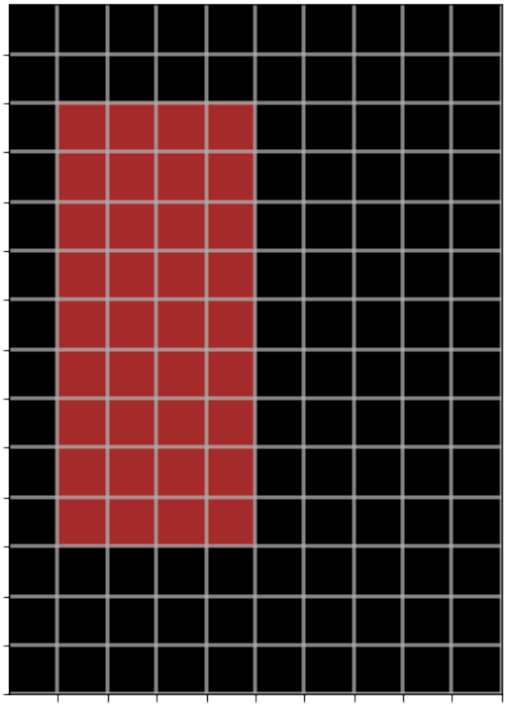
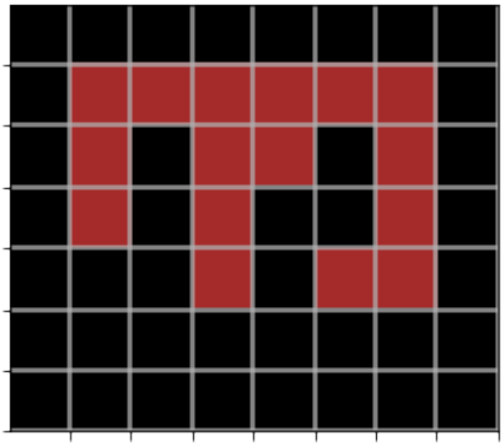
6d75e8bb.json Tr Input



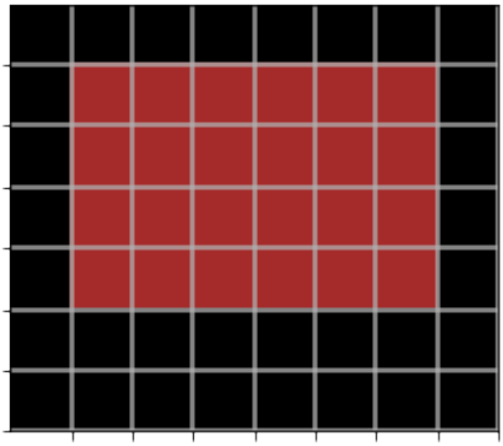
6d75e8bb.json Tr Output

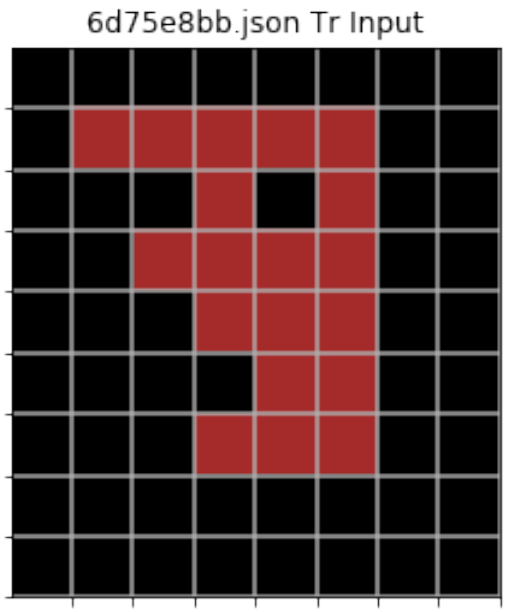


6d75e8bb.json Tr Input



6d75e8bb.json Tr Output

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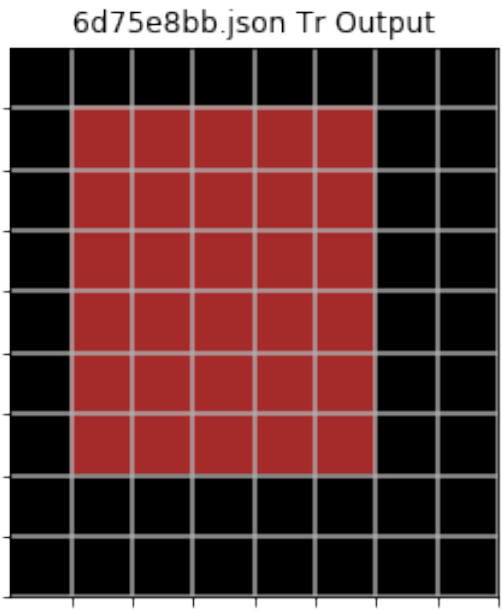
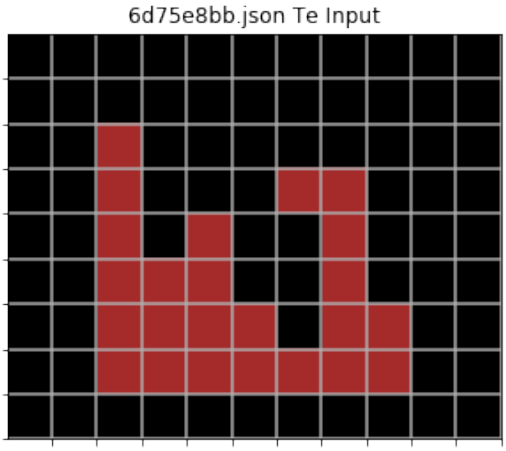
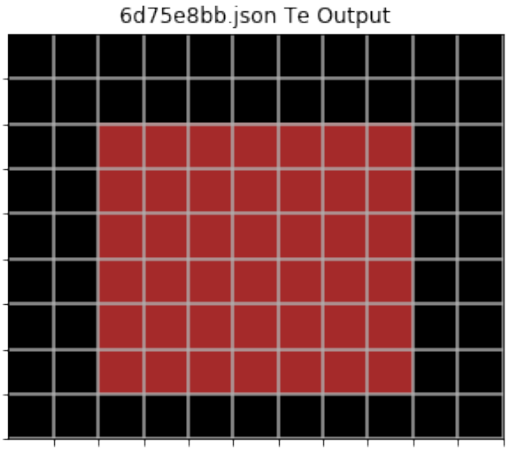

6d75e8bb.json Tr Output


6d75e8bb.json Te Input


6d75e8bb.json Te Output

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i = 42
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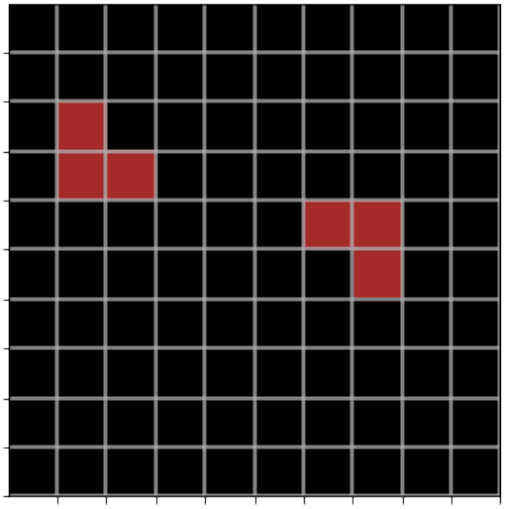
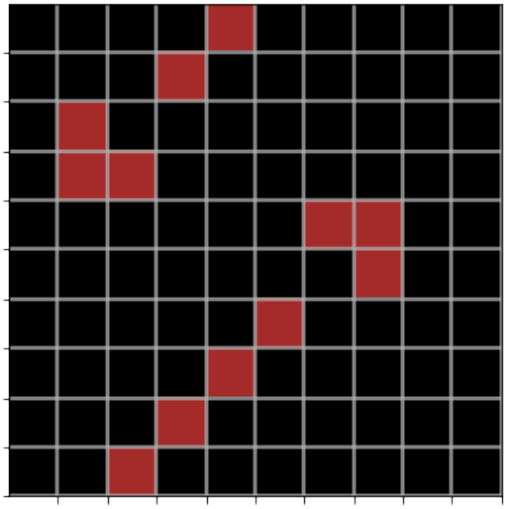
6e19193c.json Tr Input



6e19193c.json Tr Output



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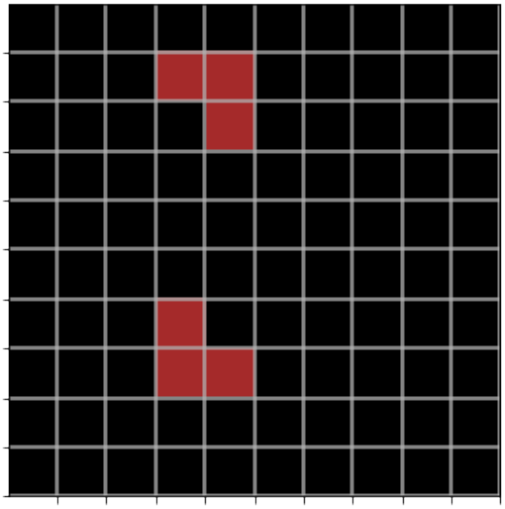

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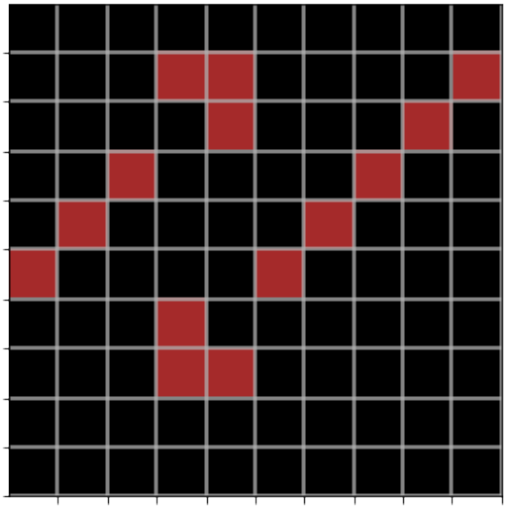

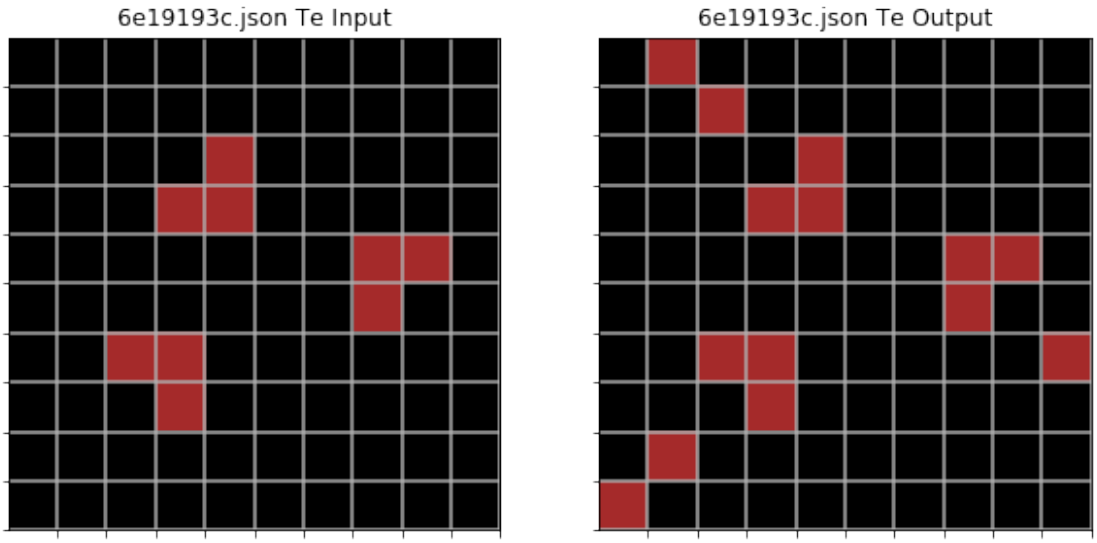
6e19193c.json Te Input
6e19193c.json Te Output

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i = 43
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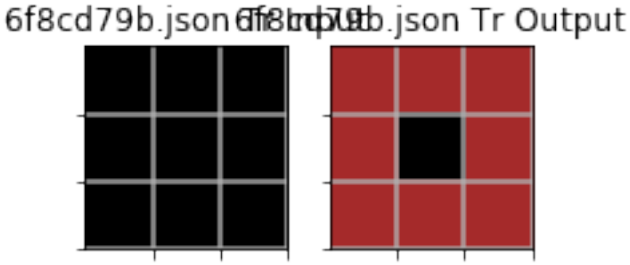
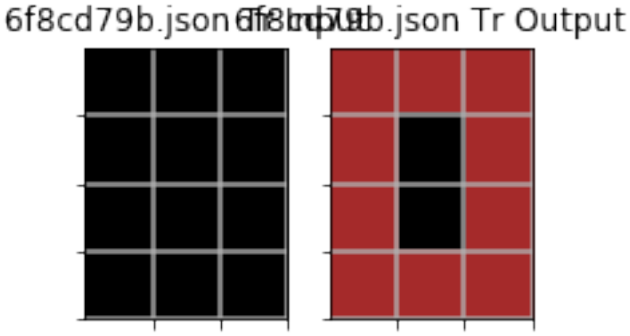

6f8cd79b.json Tr Output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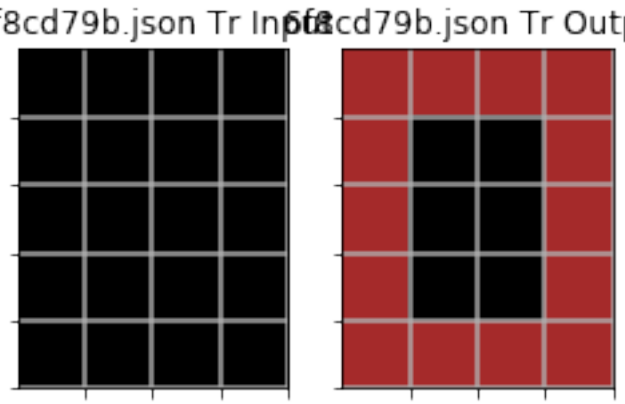
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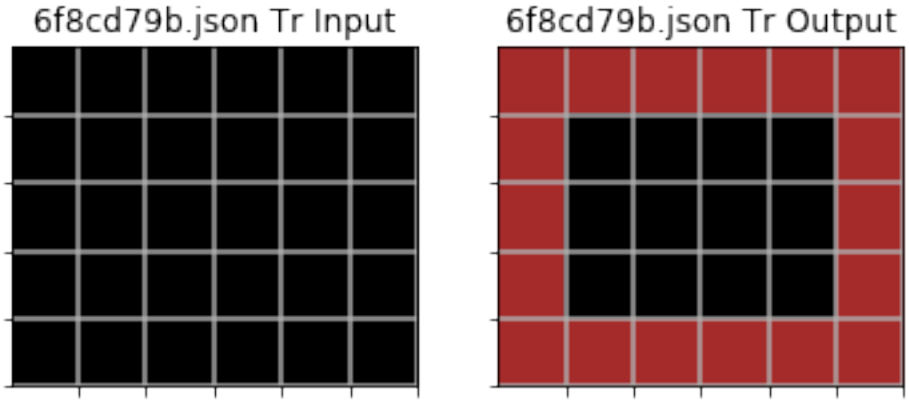
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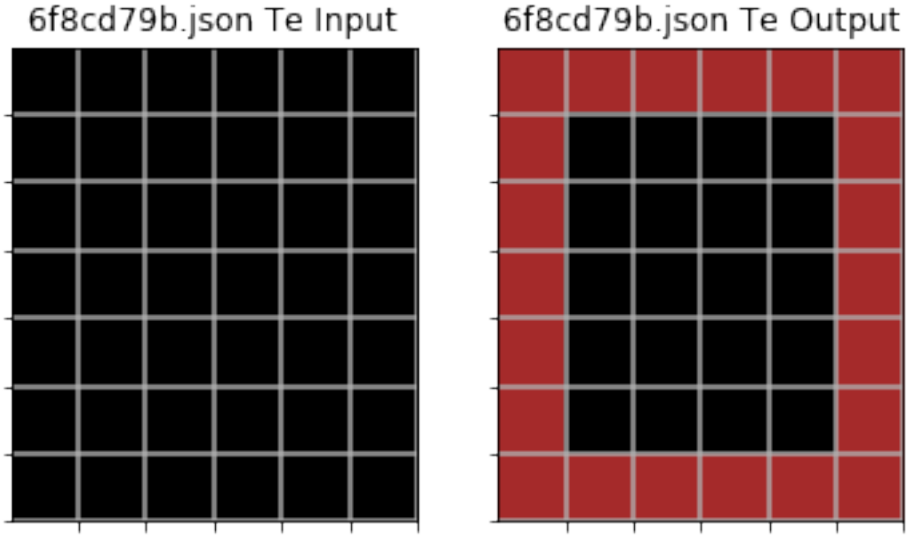
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6f8cd79b.json Te Output

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i = 44
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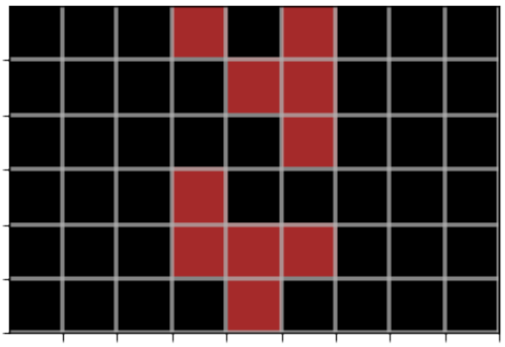
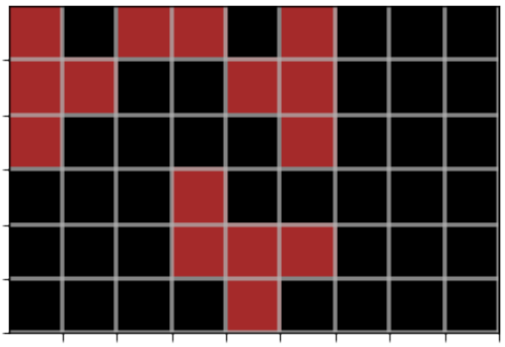
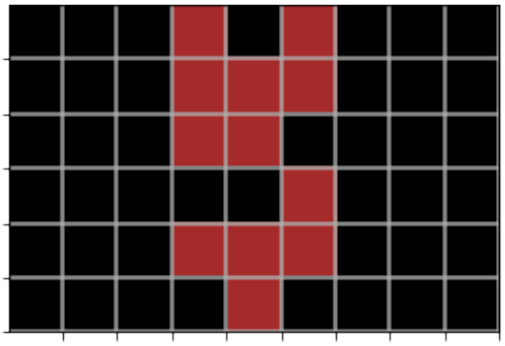
760b3cac.json Tr Input



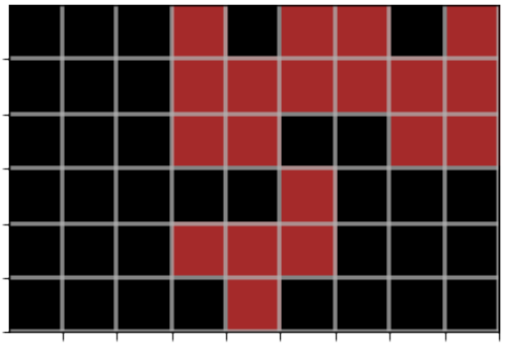
760b3cac.json Tr Output



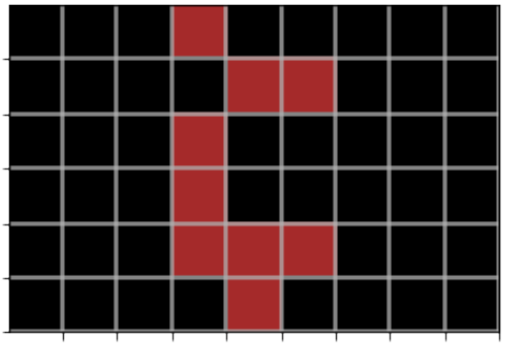
760b3cac.json Tr Input



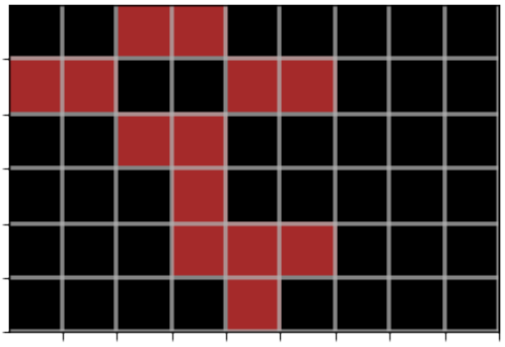
760b3cac.json Tr Output

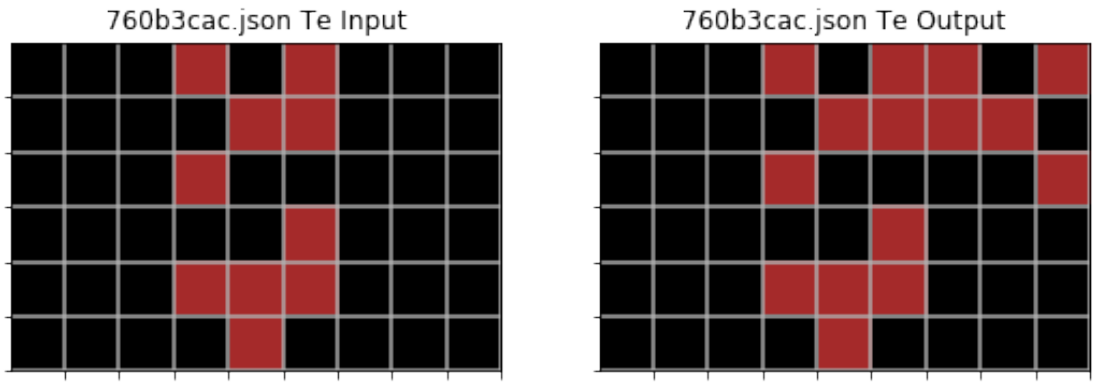


760b3cac.json Tr Input



760b3cac.json Tr Output




760b3cac.json Te Input
760b3cac.json Te Output

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i = 45
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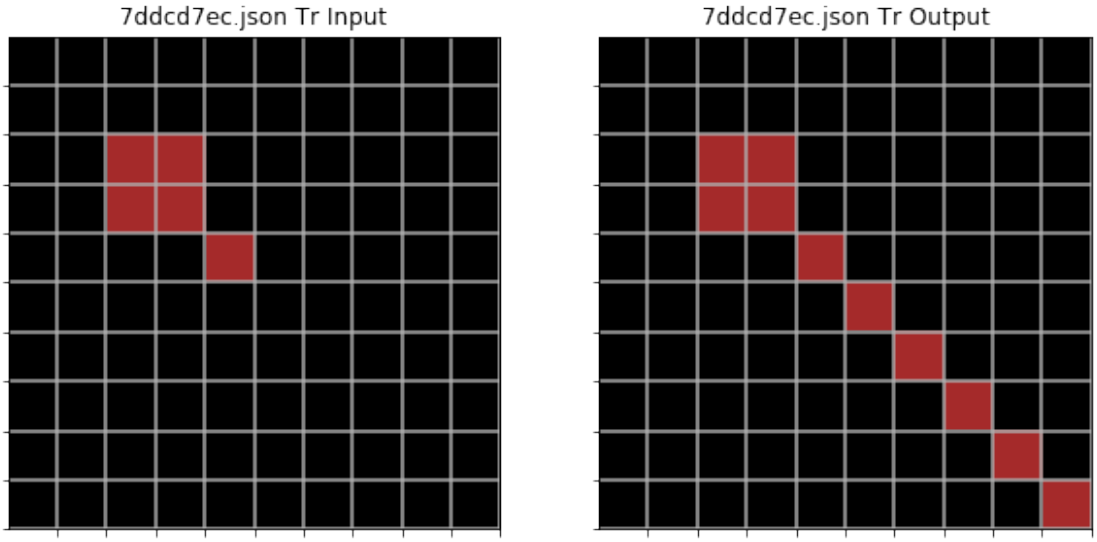
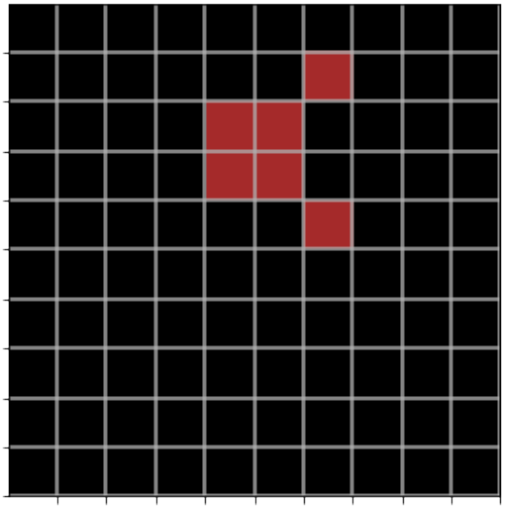
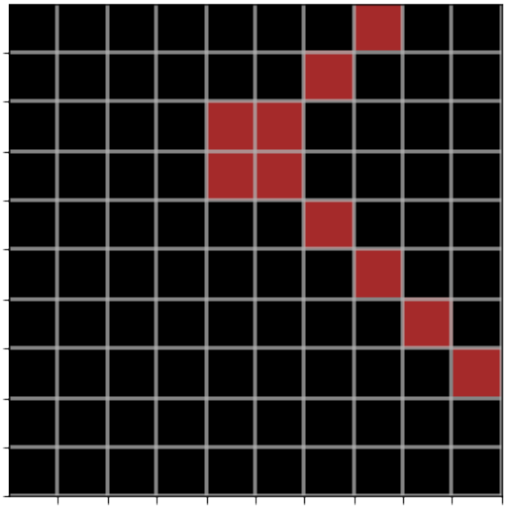

7ddcd7ec.json Tr Input
7ddcd7ec.json Tr Output

7ddcd7ec.json Tr Input



7ddcd7ec.json Tr Output



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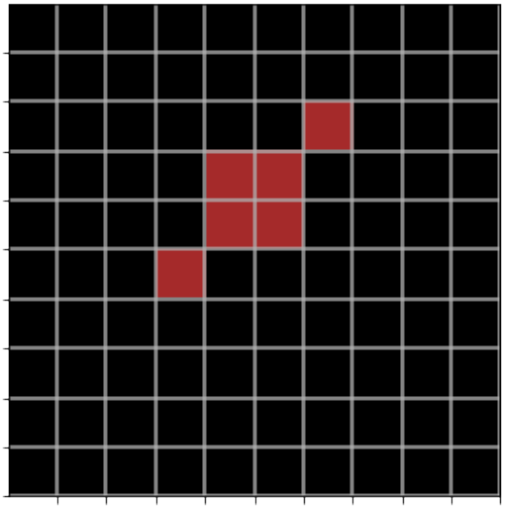

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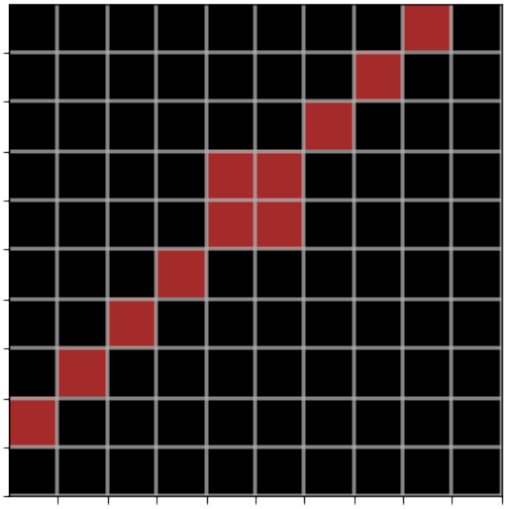

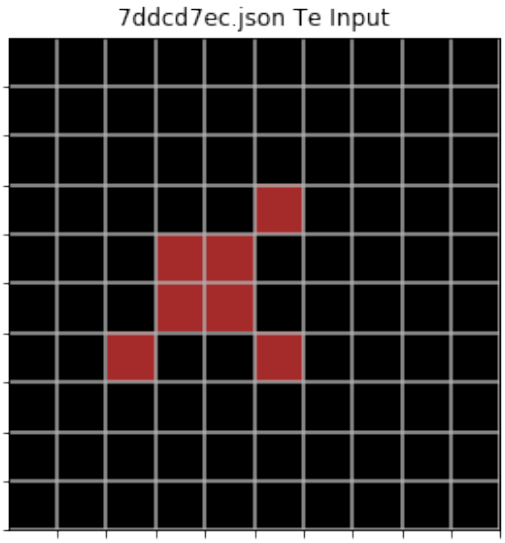
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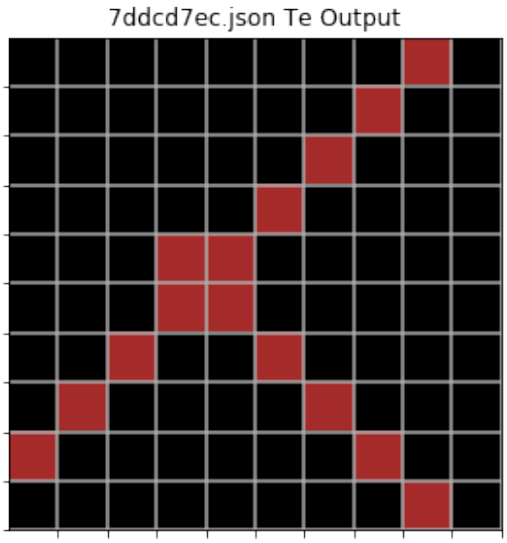
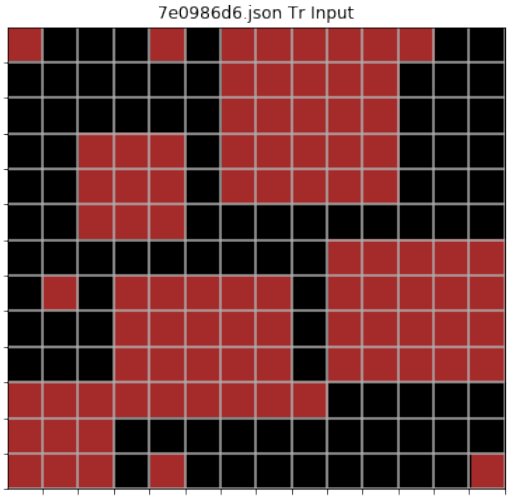
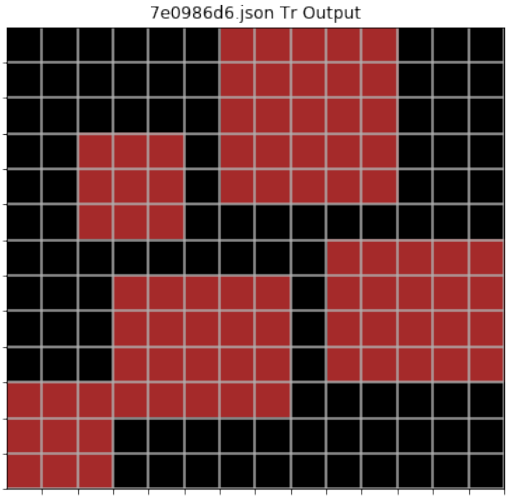
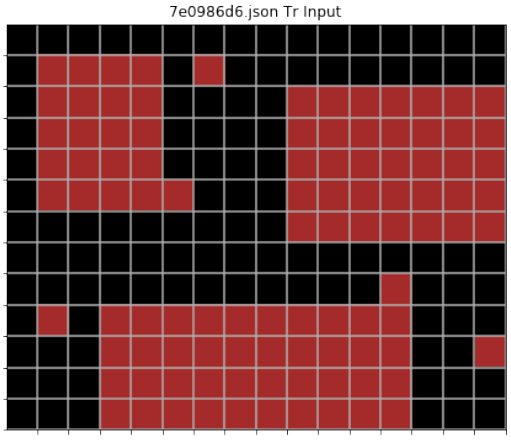
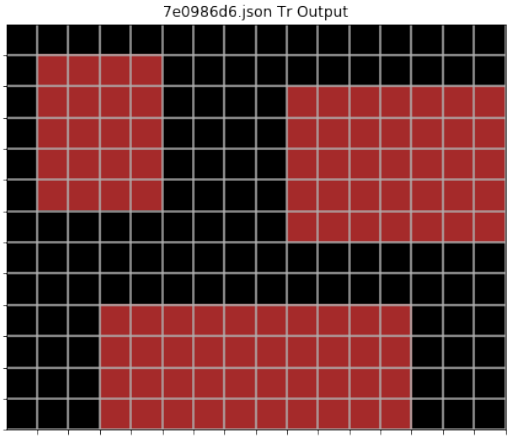

7ddcd7ec.json Te Output

i = 46


7e0986d6.json Tr Input


7e0986d6.json Tr Output


7e0986d6.json Tr Input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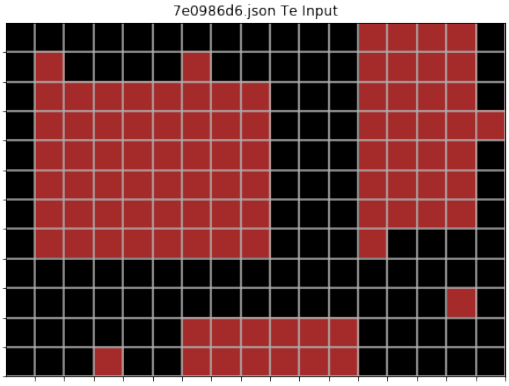
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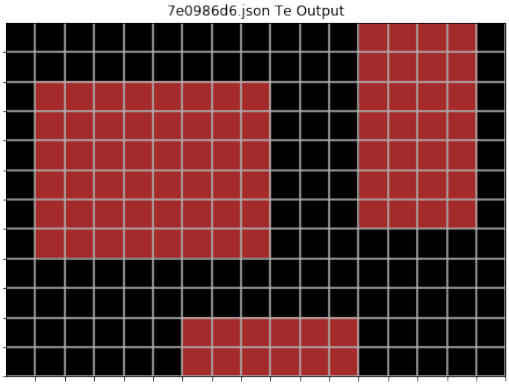
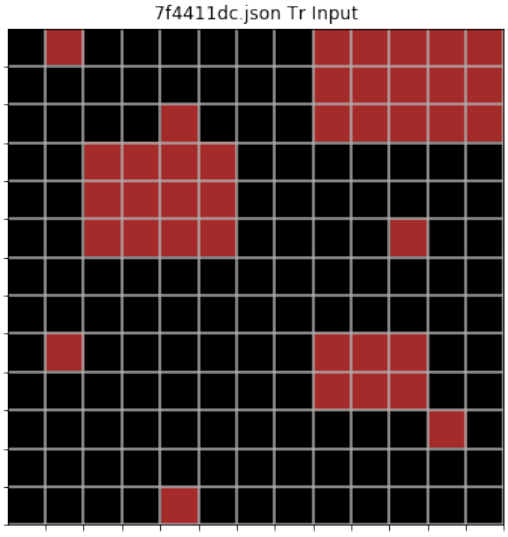
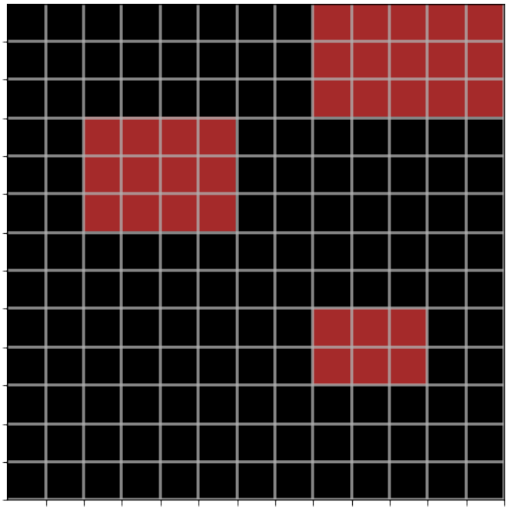

7e0986d6.json Te Output

i = 47


7f4411dc.json Tr Input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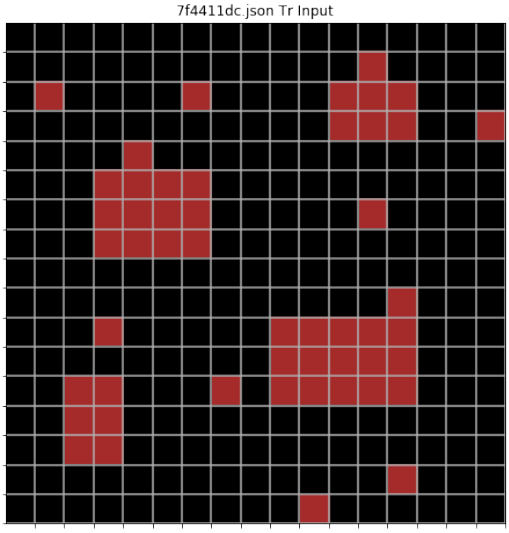
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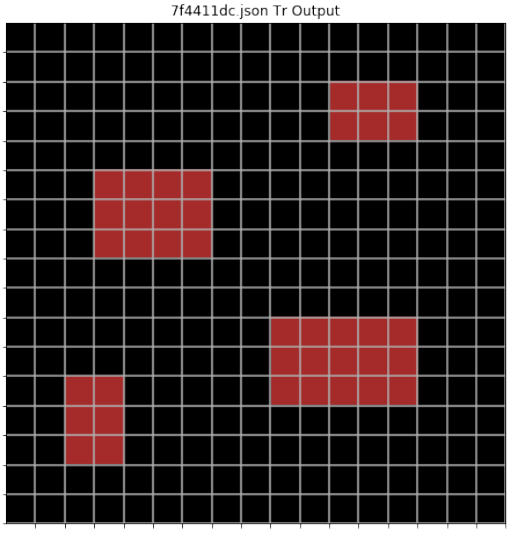
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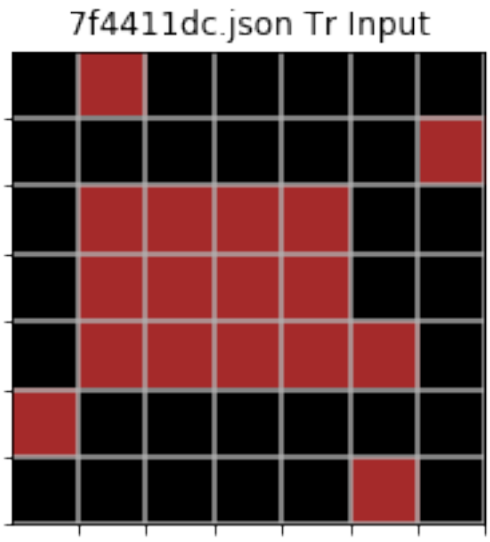
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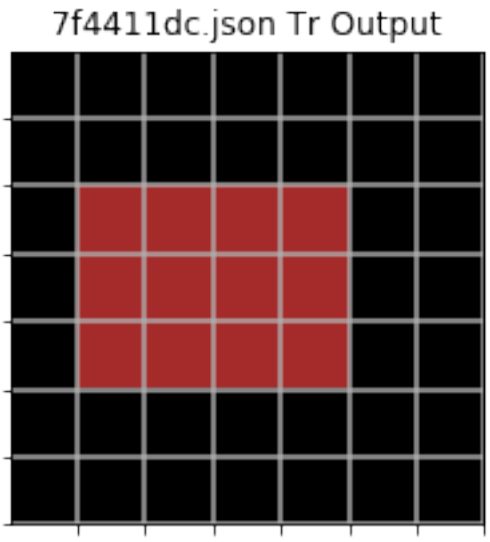
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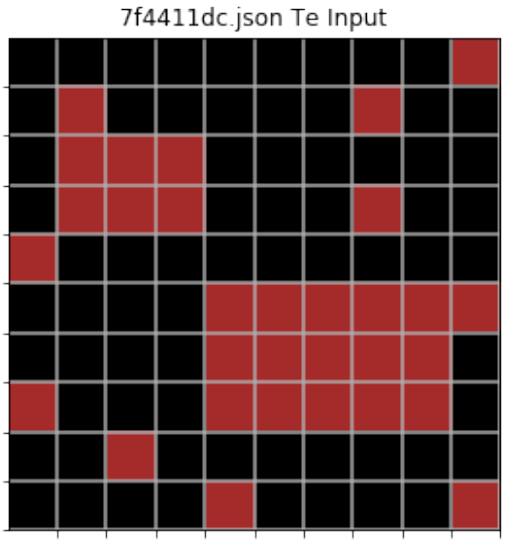
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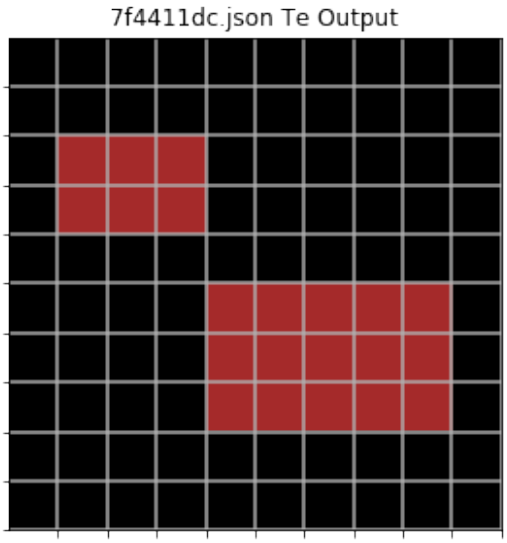
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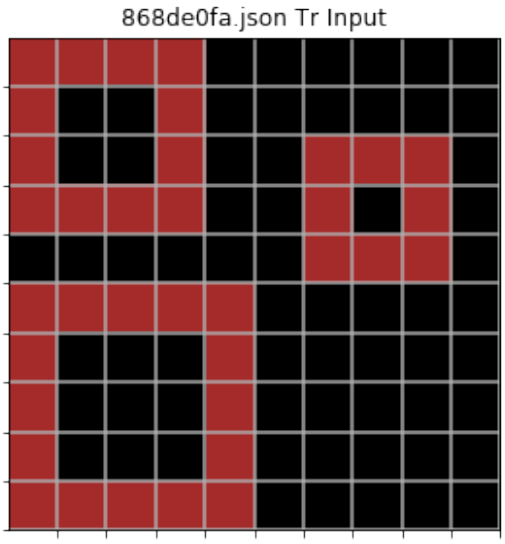
i = 48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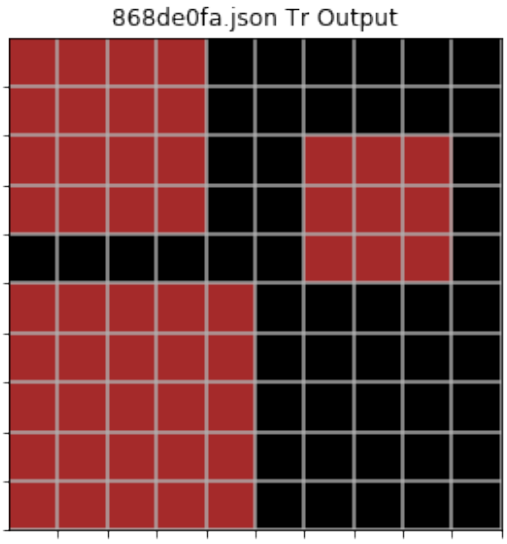
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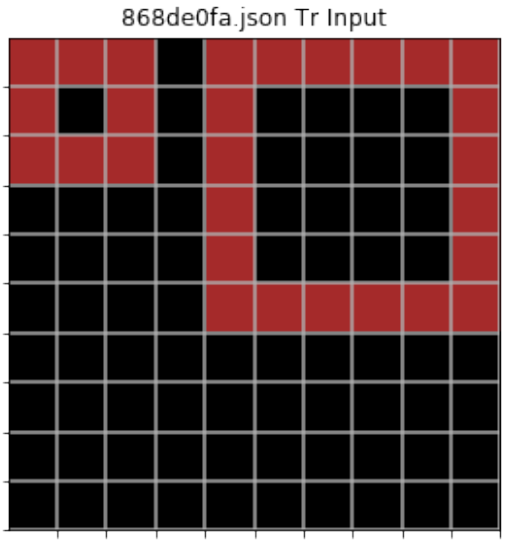
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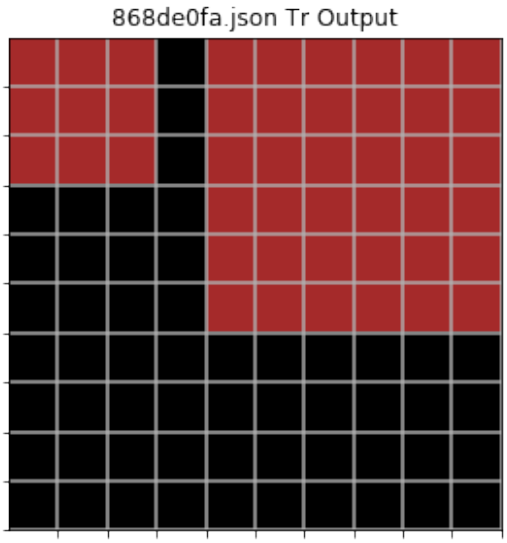
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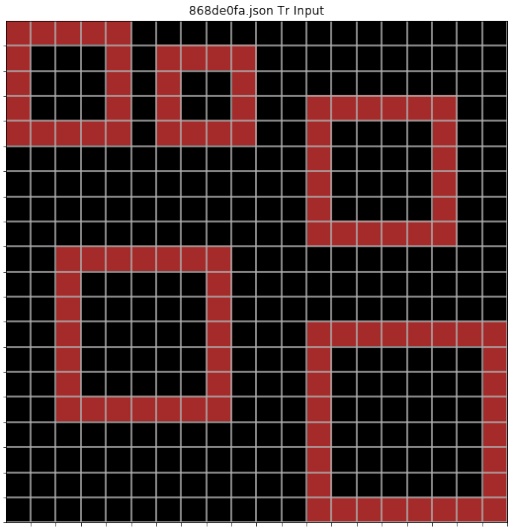
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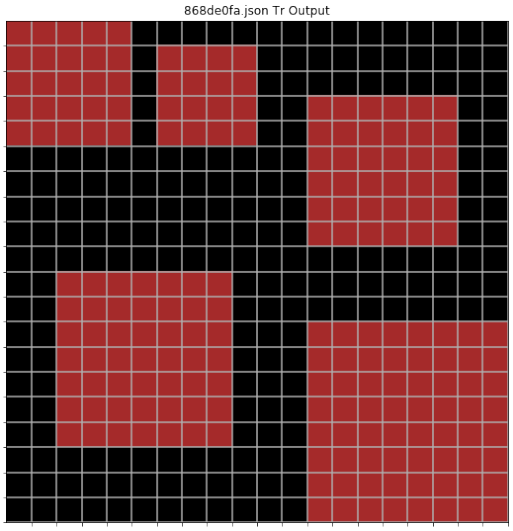
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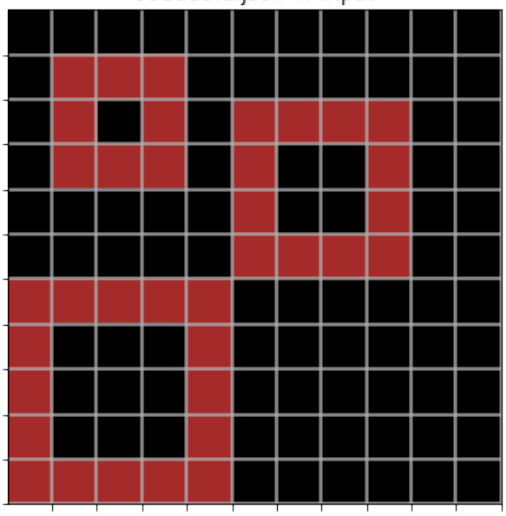

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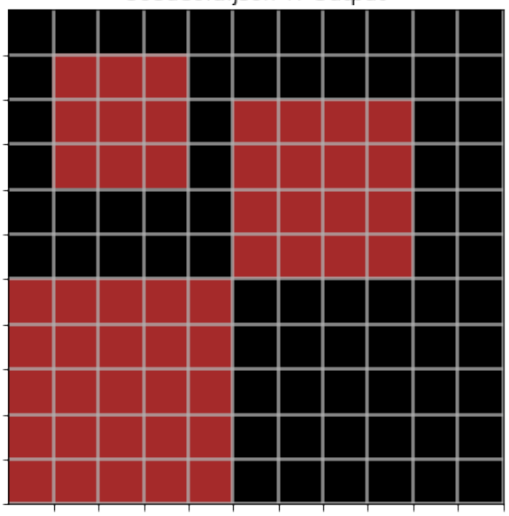

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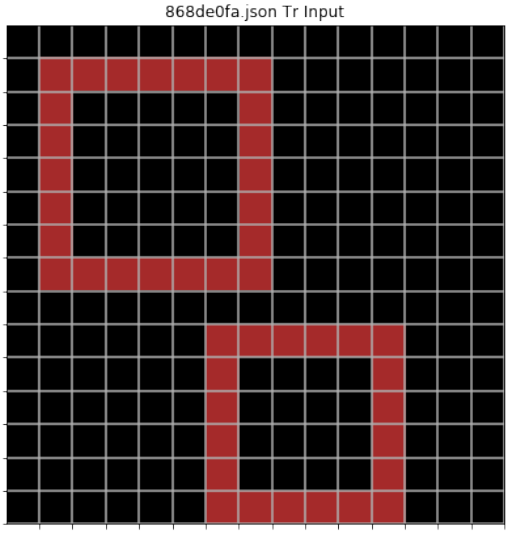

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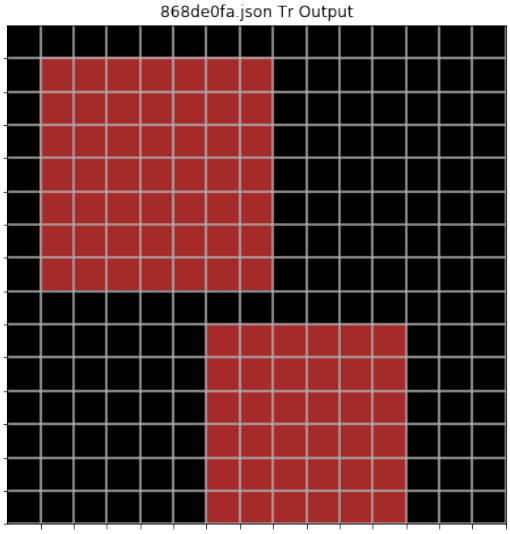

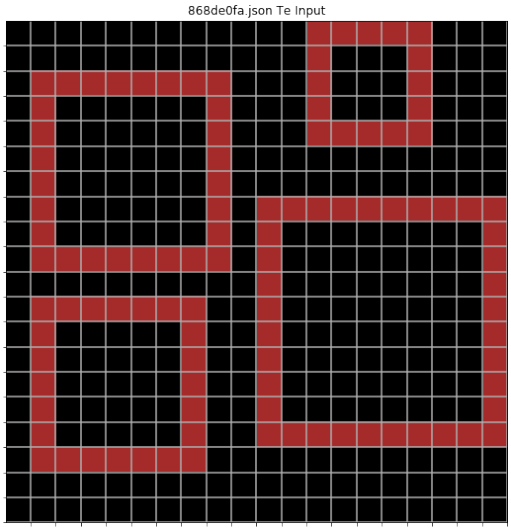
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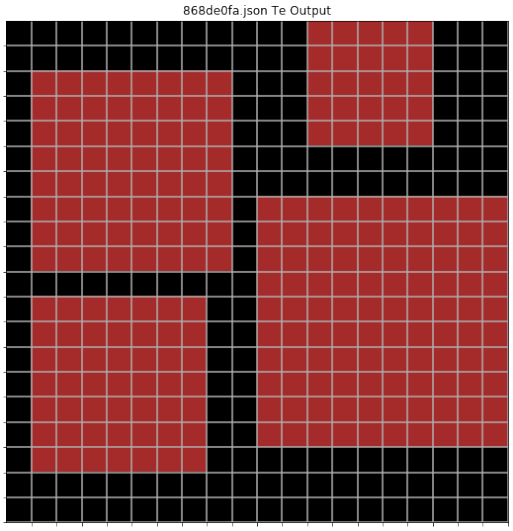
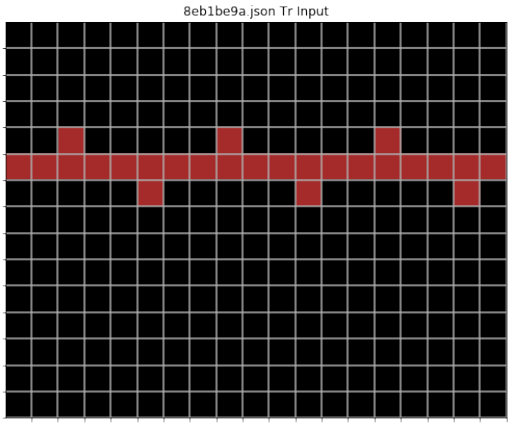

868de0fa.json Te Output

i = 49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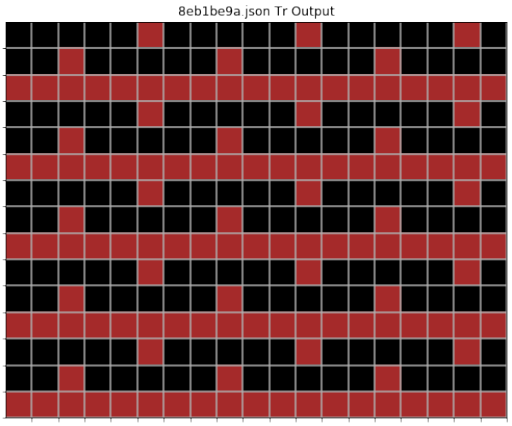
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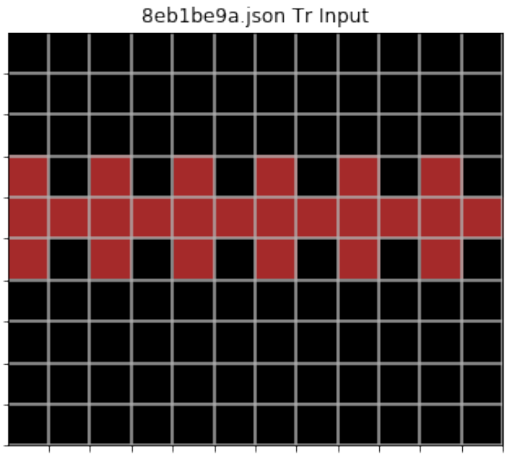
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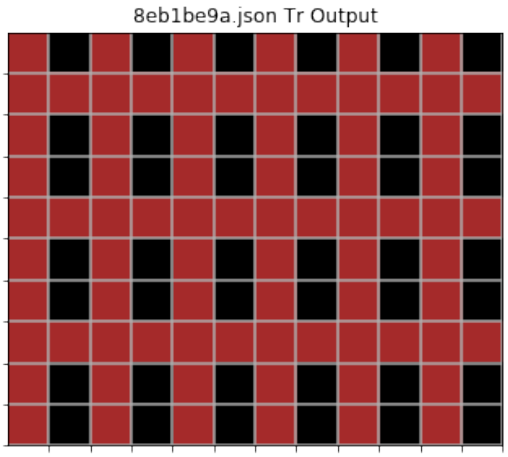
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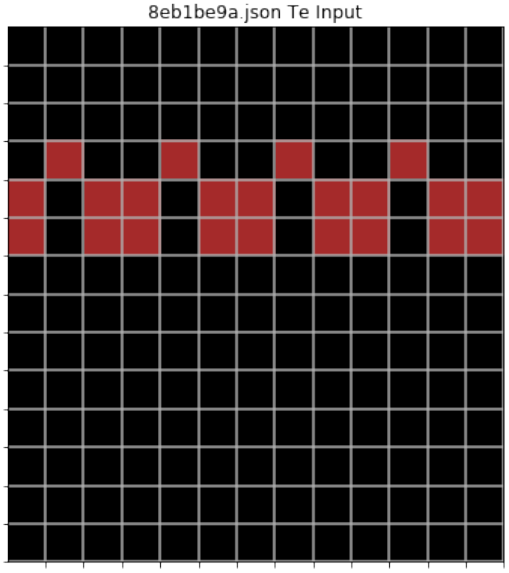
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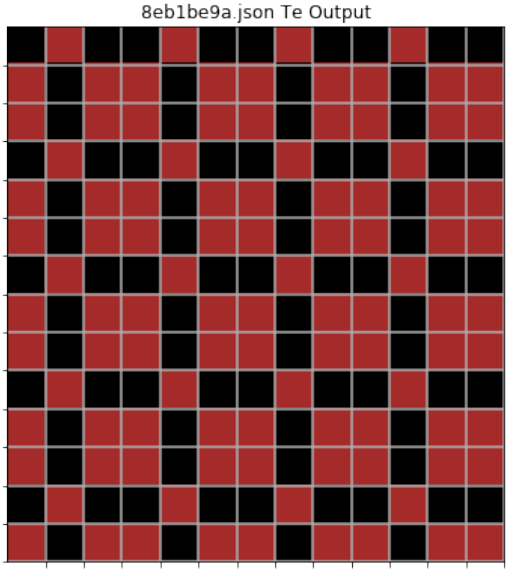
8eb1be9a.json Te Output

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i = 50
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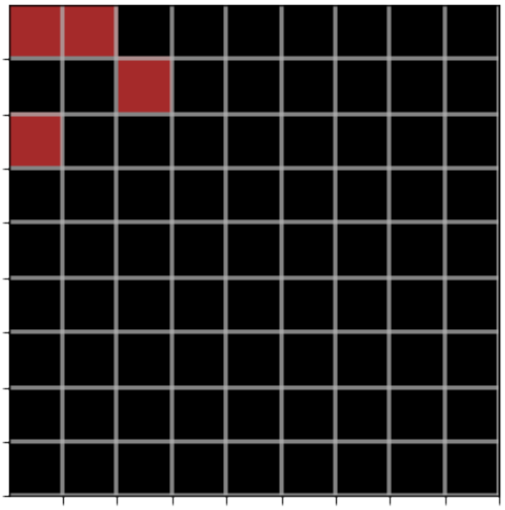
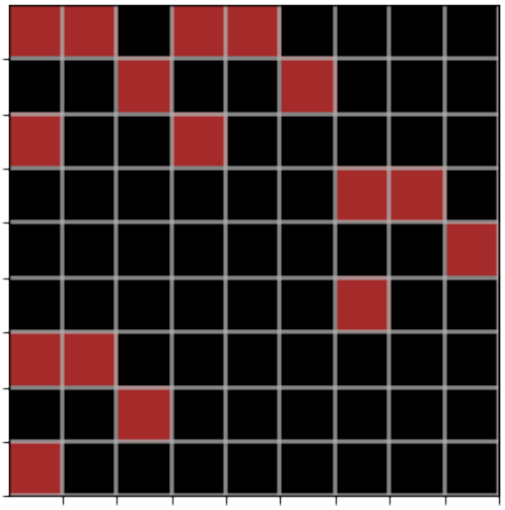
8f2ea7aa.json Tr Input



8f2ea7aa.json Tr Output



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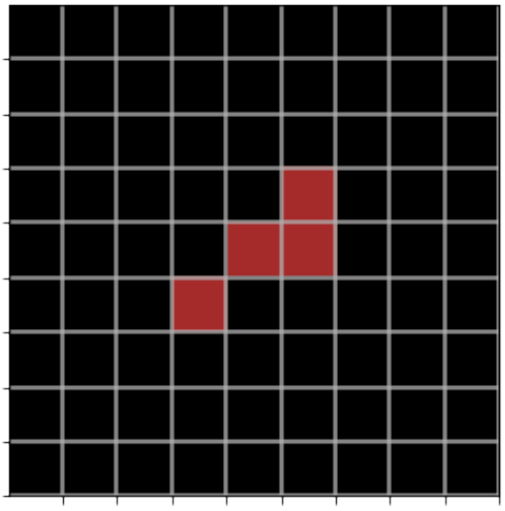

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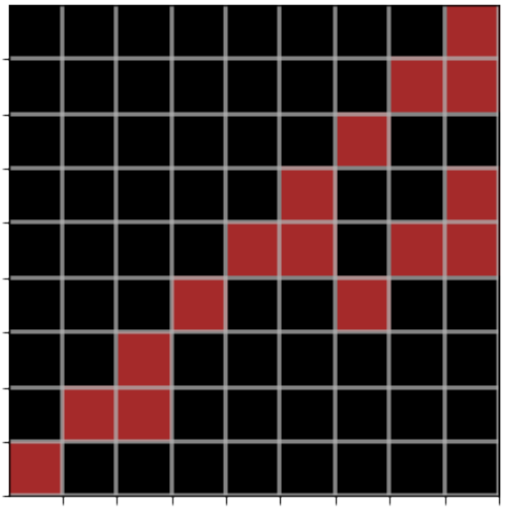

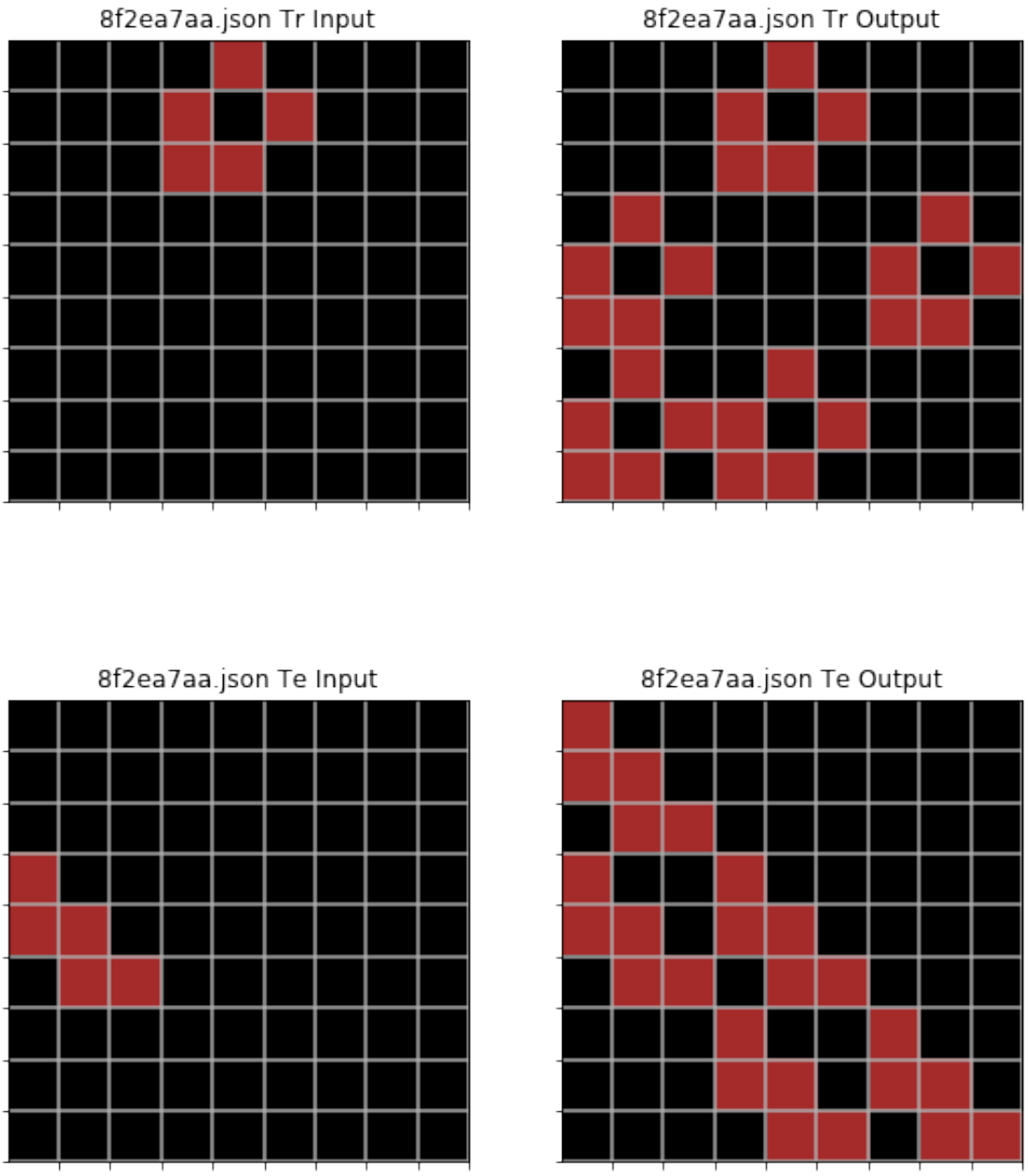
8f2ea7aa.json Tr Input
8f2ea7aa.json Tr Output
8f2ea7aa.json Te Input
8f2ea7aa.json Te Output

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i = 51
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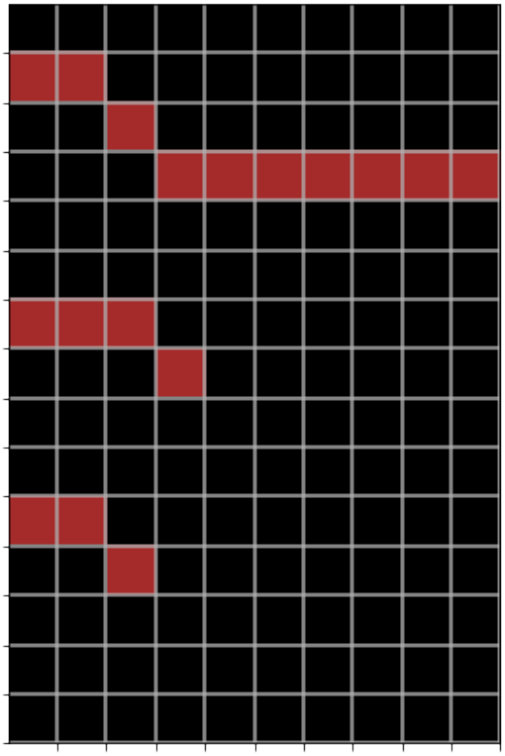
90f3ed37.json Tr Input



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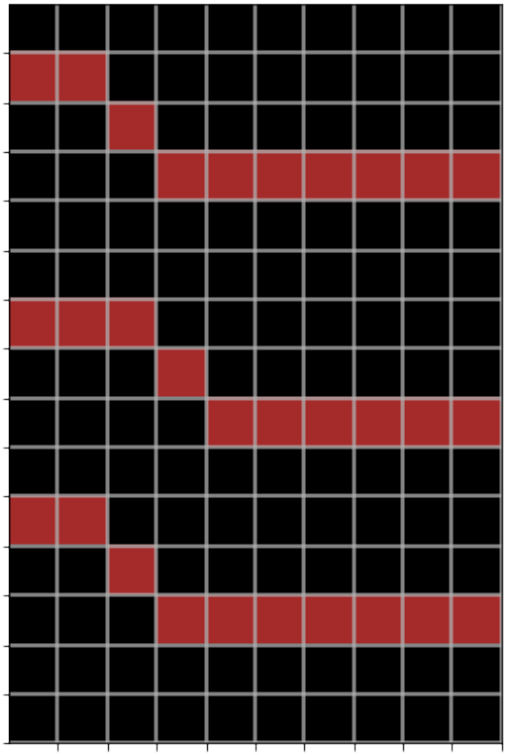

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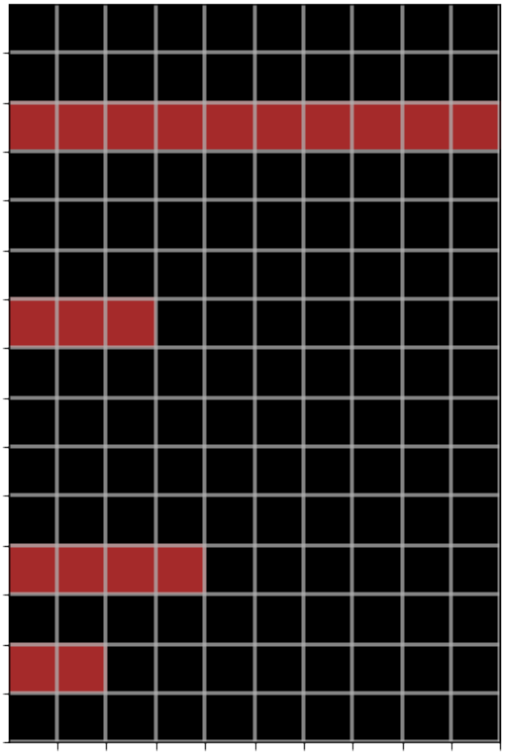
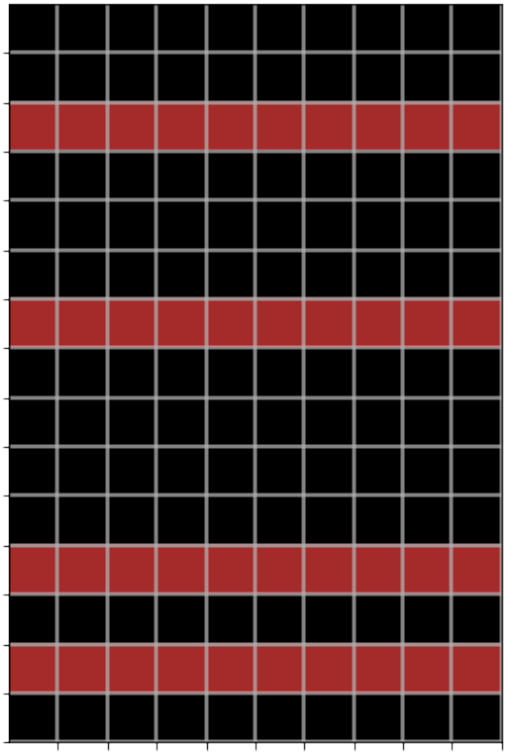


90f3ed37.json Tr Output



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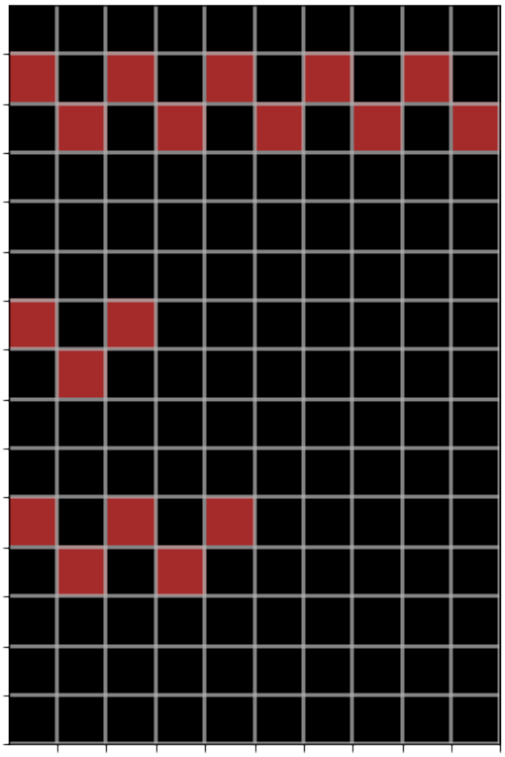

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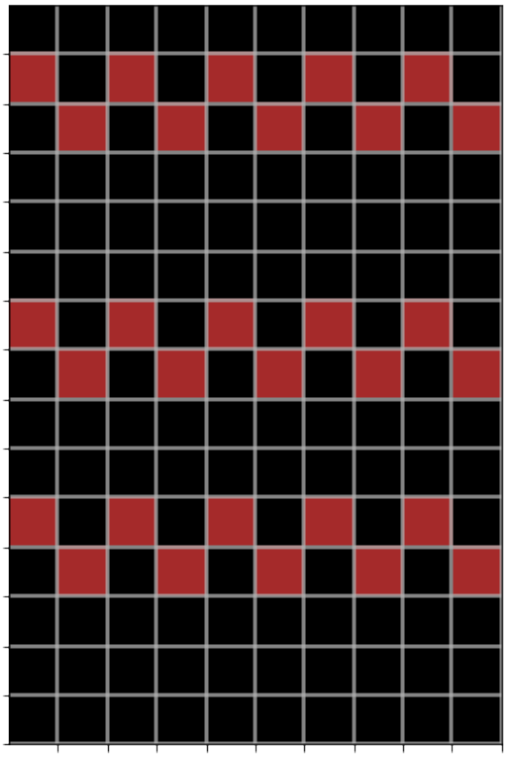

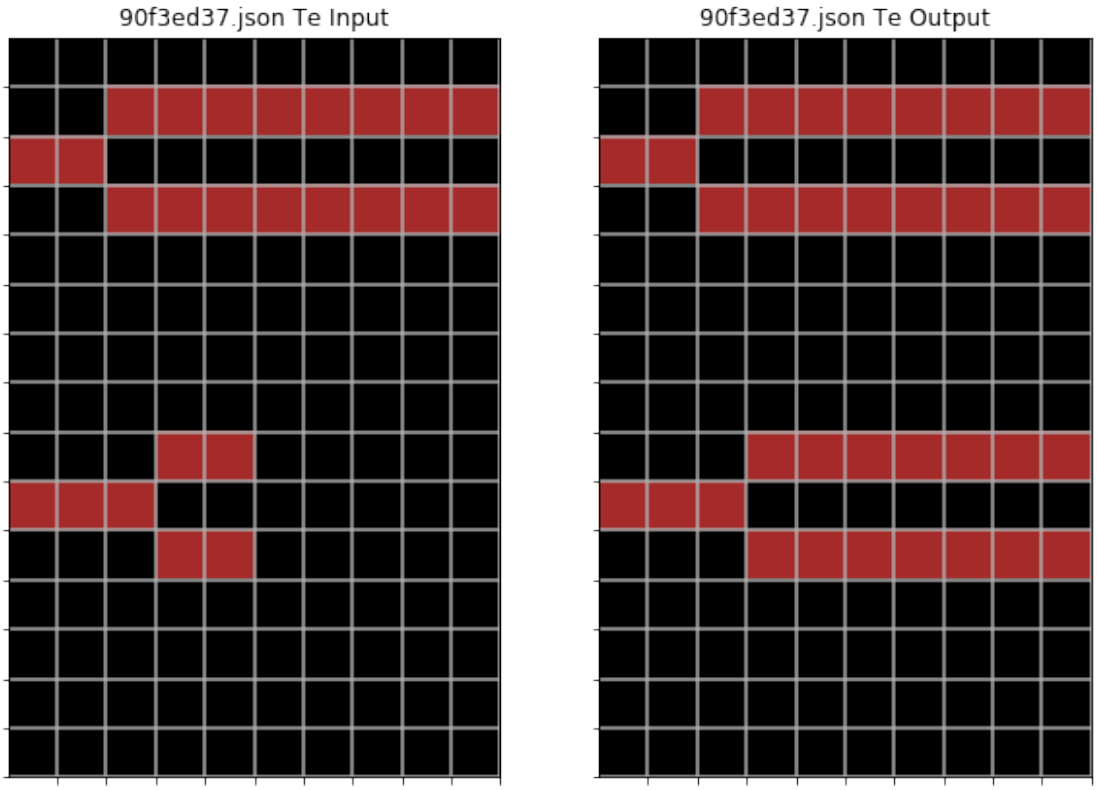
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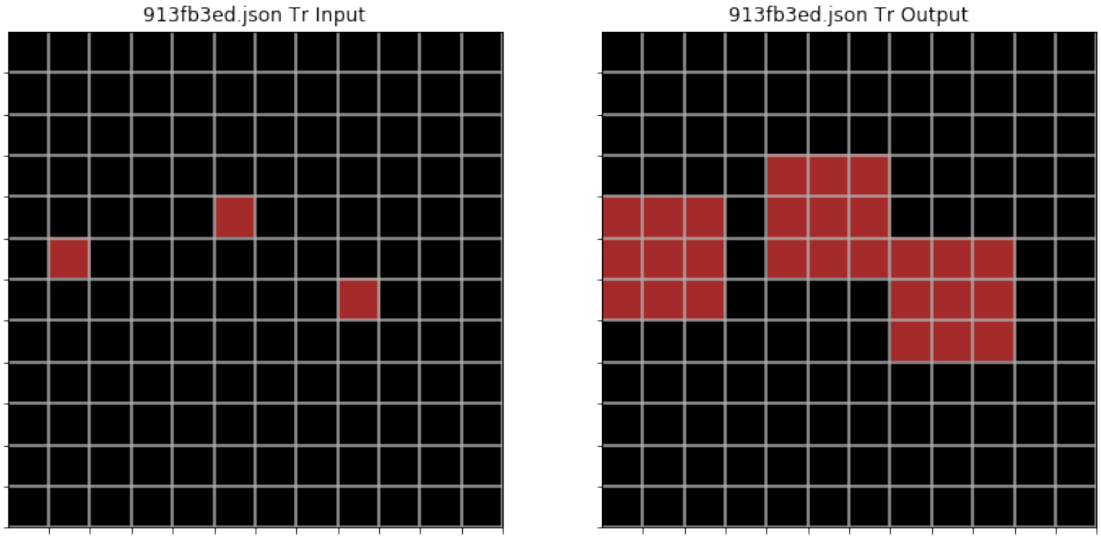
90f3ed37.json Te Output

i = 52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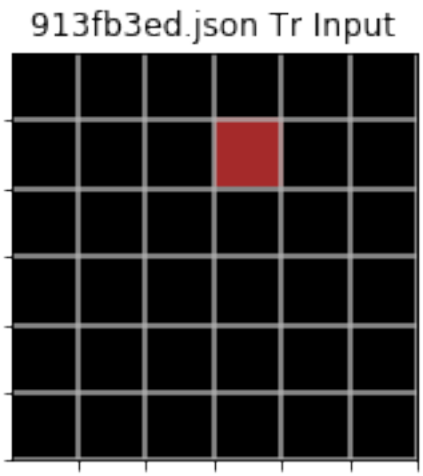
913fb3ed.json Tr Output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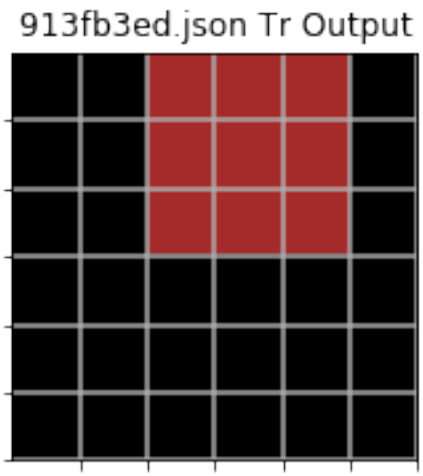
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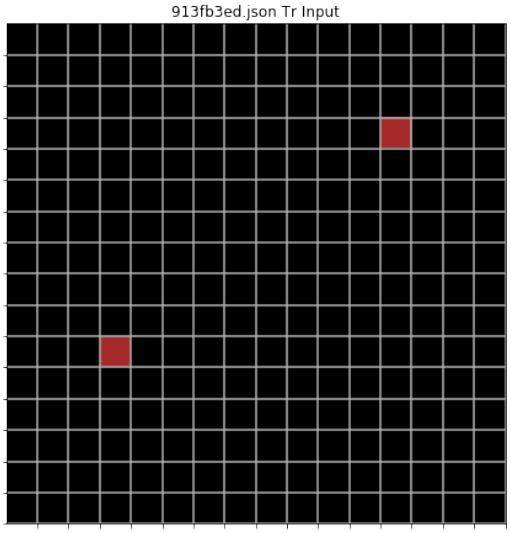
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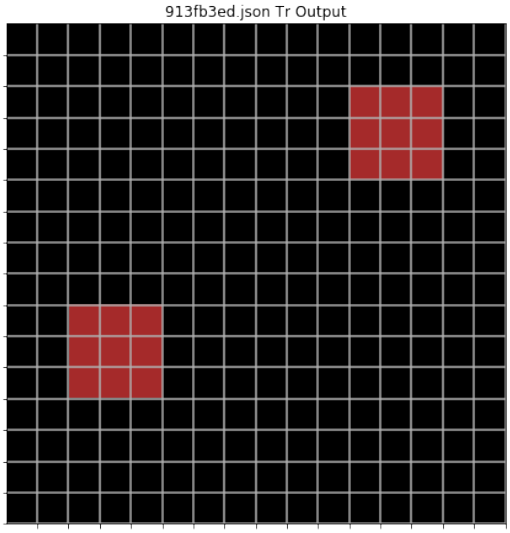
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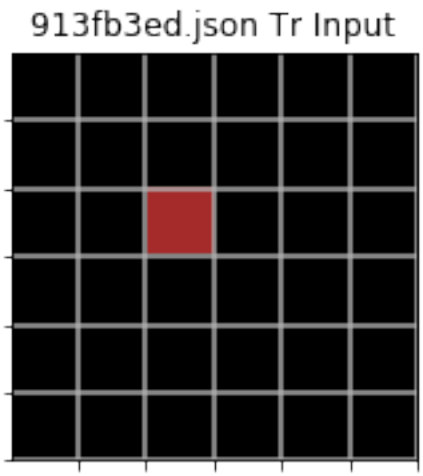
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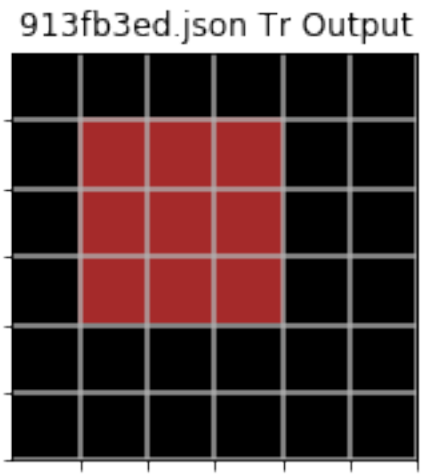
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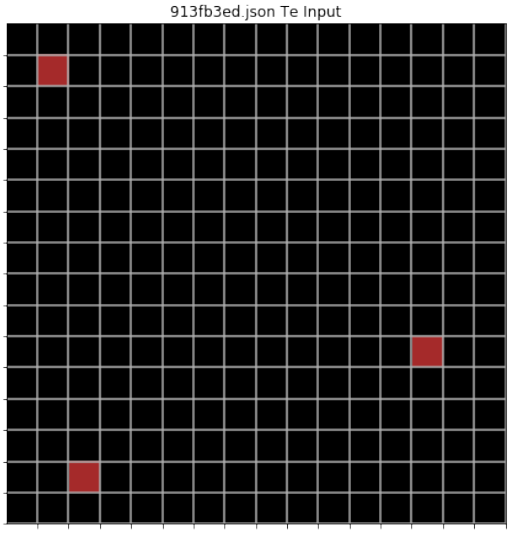
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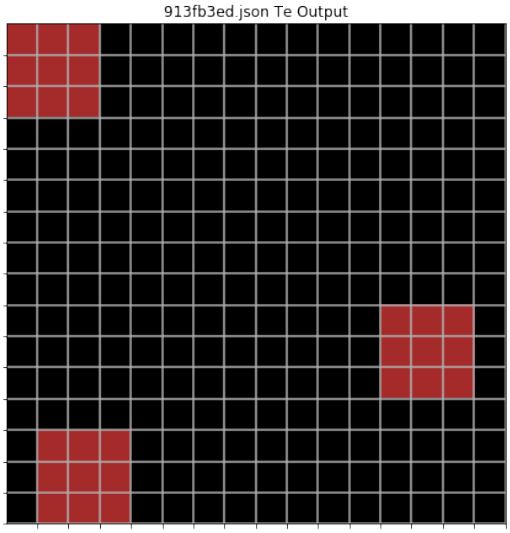
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i = 53
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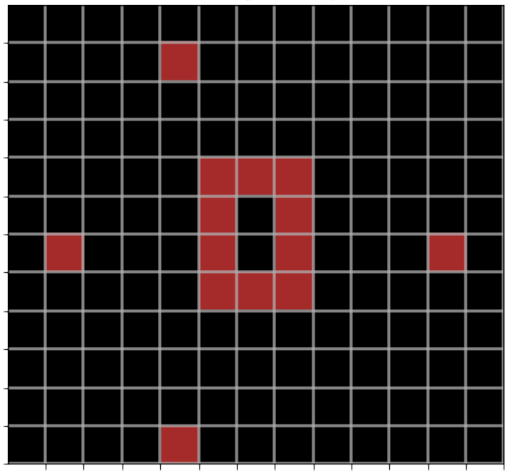
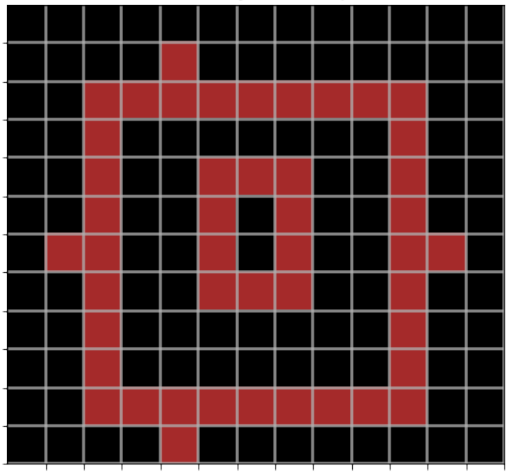
928ad970.json Tr Input



928ad970.json Tr Output



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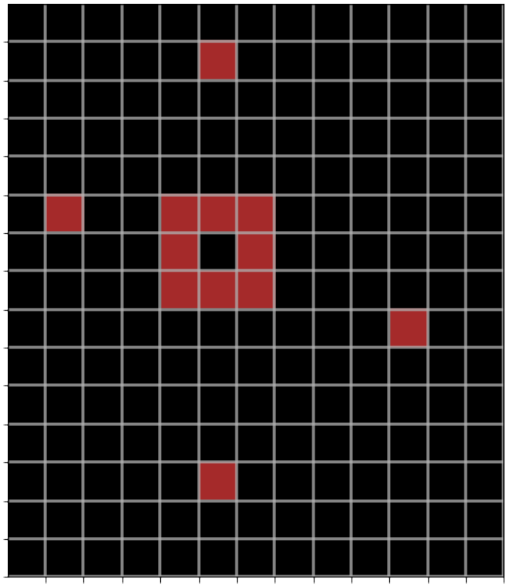

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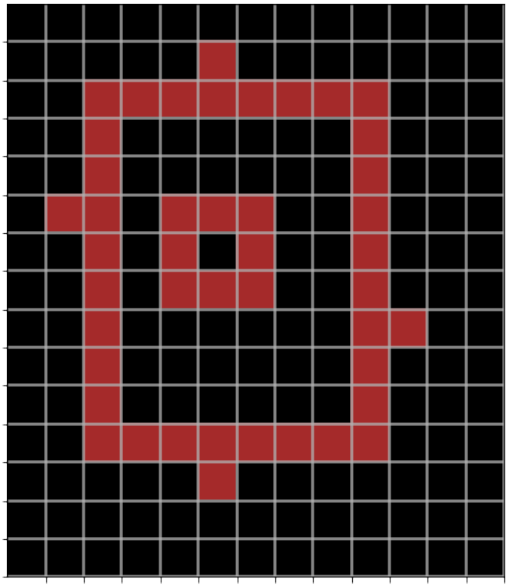

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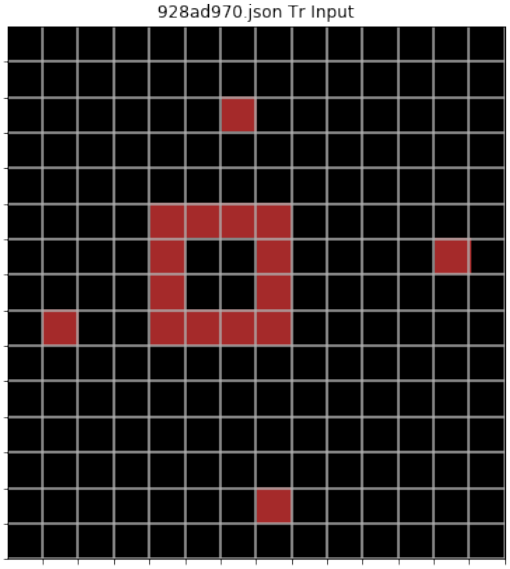

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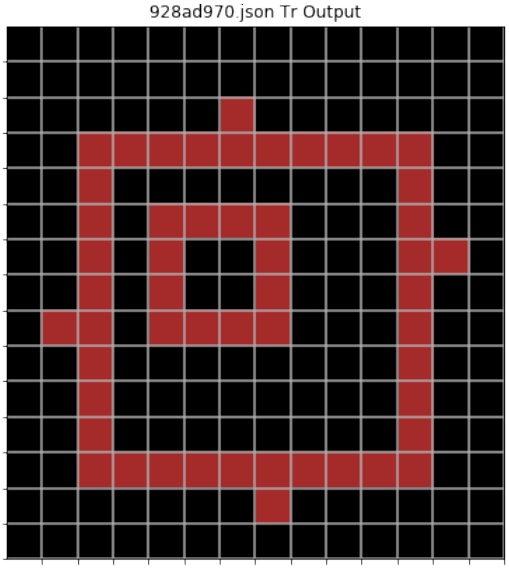

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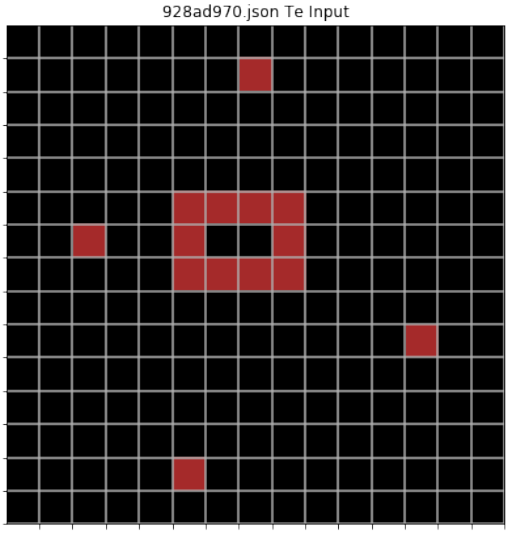

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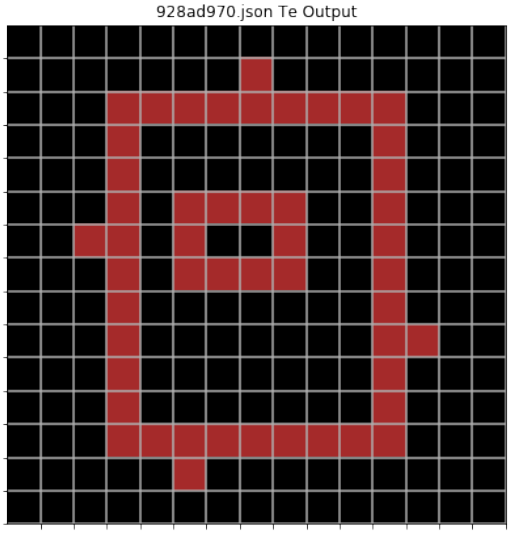

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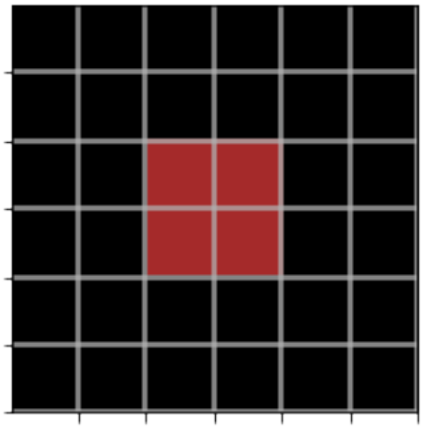
93b581b8.json Tr Input



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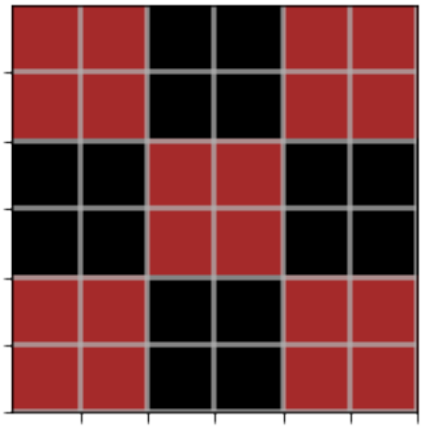

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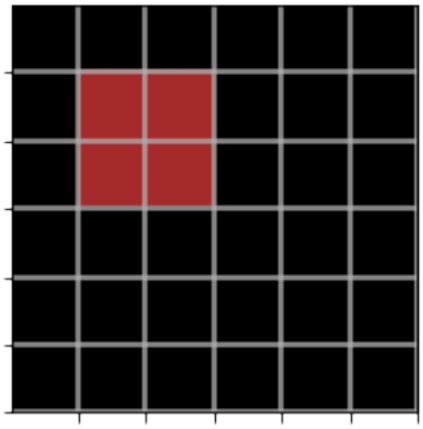

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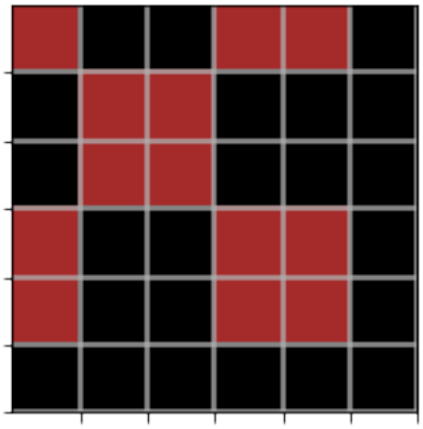

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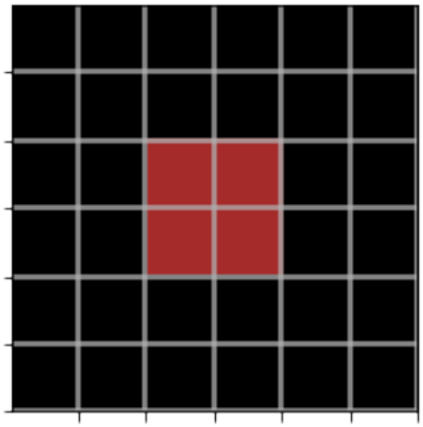

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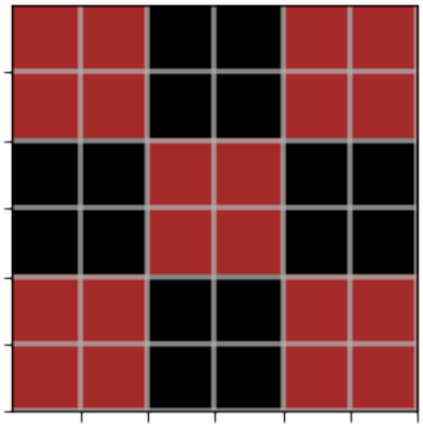

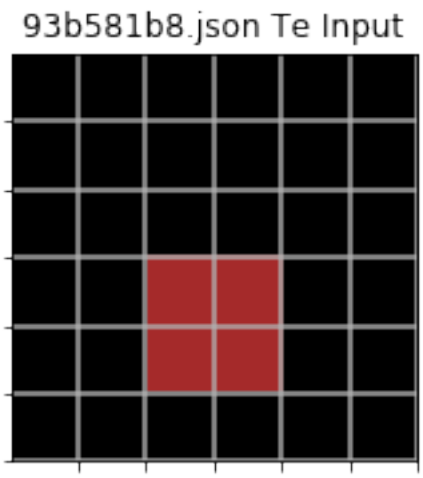
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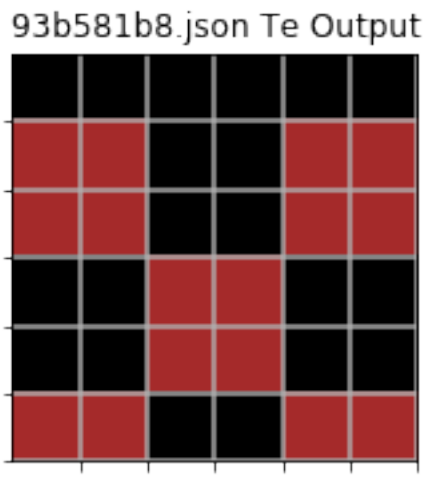
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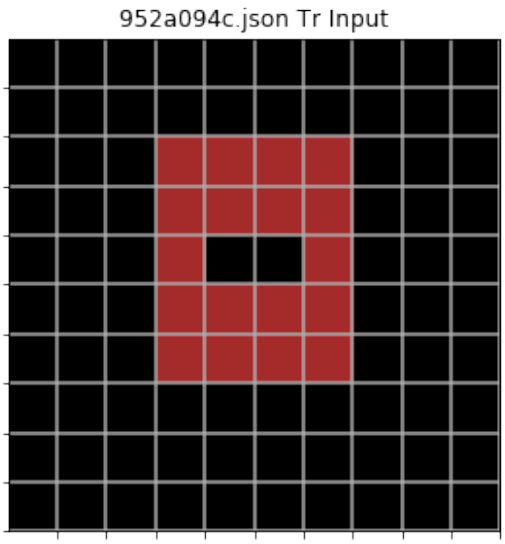
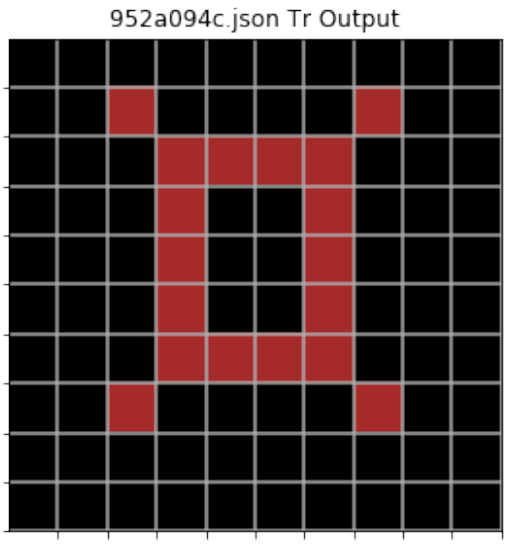
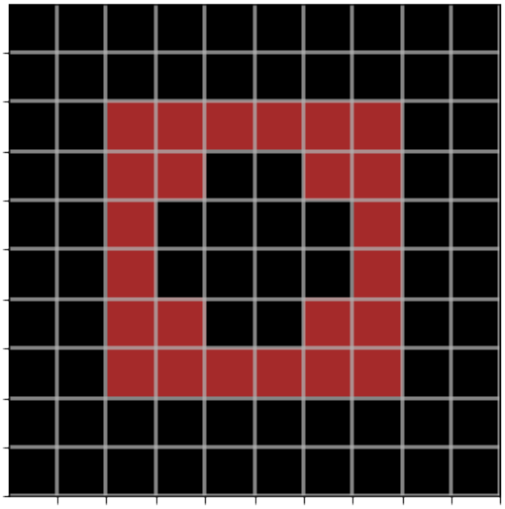

952a094c.json Tr Input


952a094c.json Tr Output

952a094c.json Tr Input



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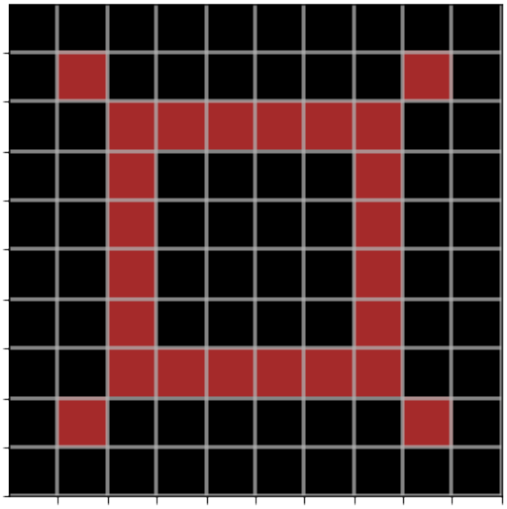

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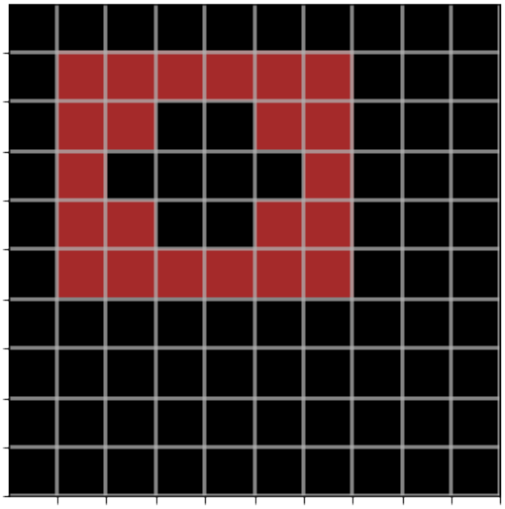

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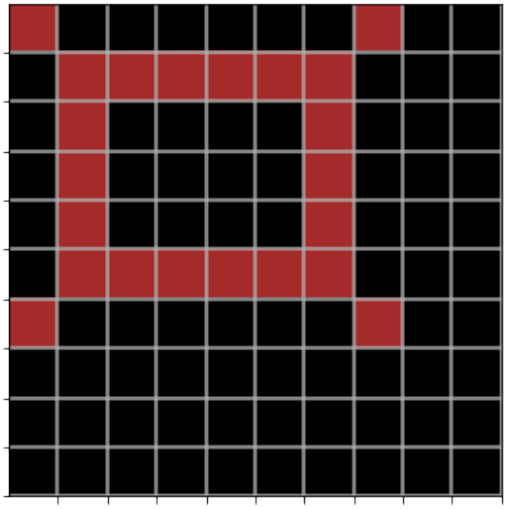

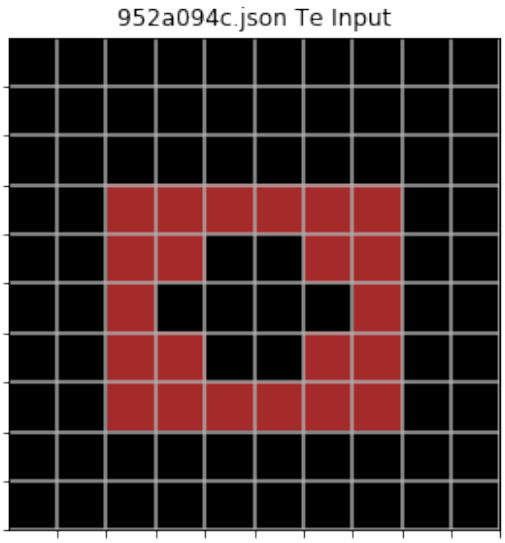
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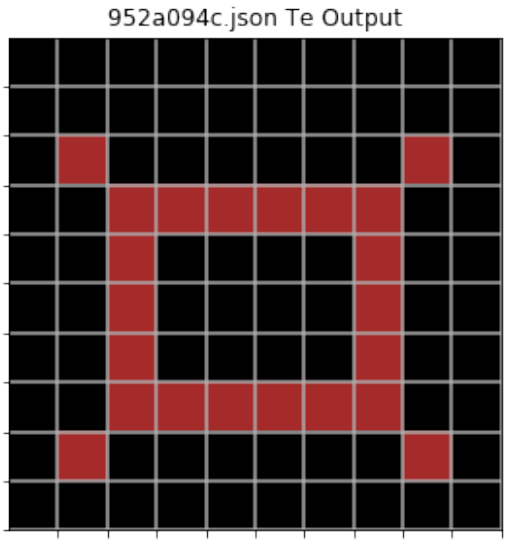
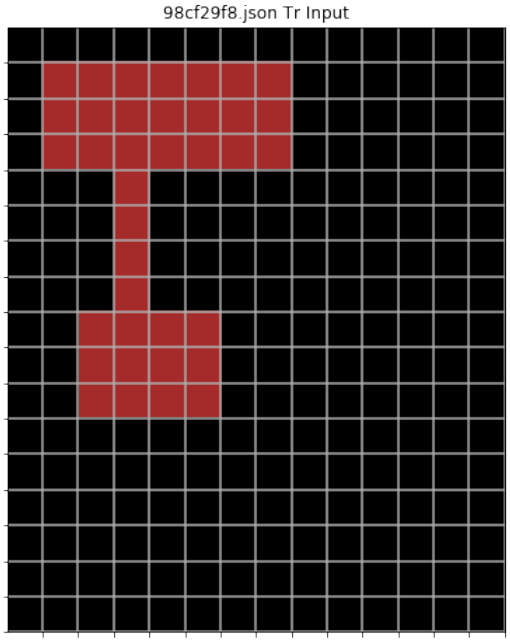
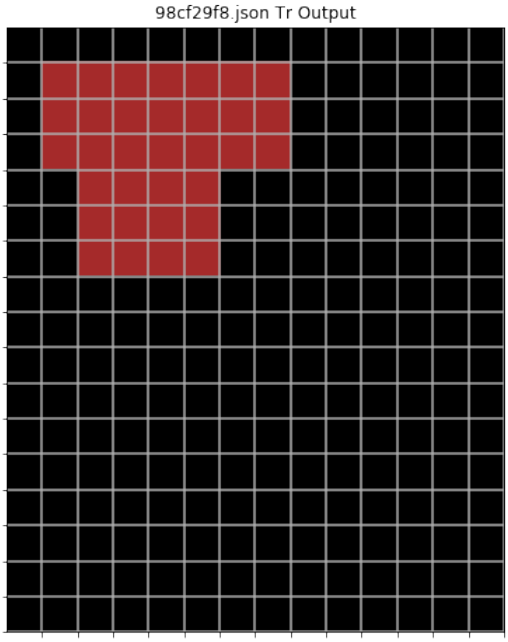
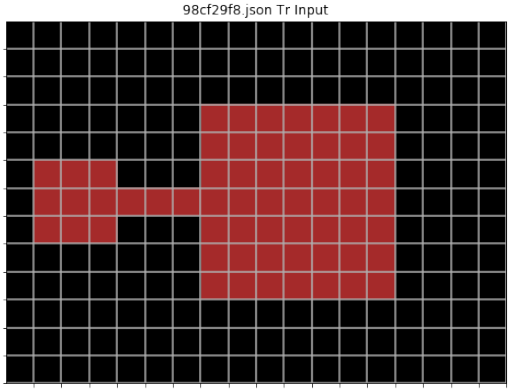

952a094c.json Te Output

i = 56

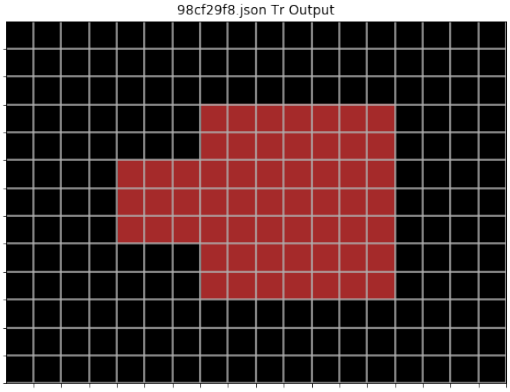

98cf29f8.json Tr Input


98cf29f8.json Tr Output

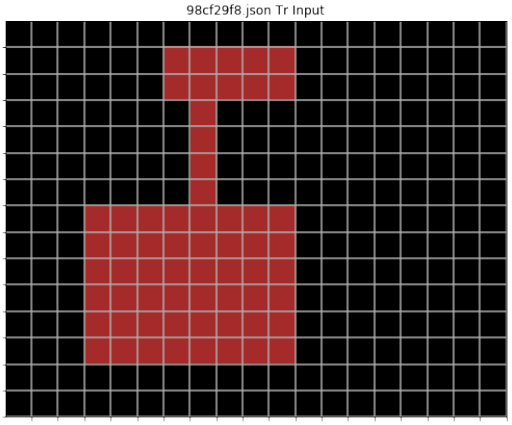
98cf29f8.json Tr Input



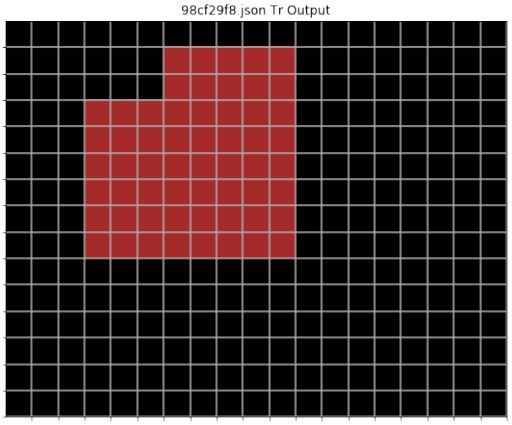
98cf29f8.json Tr Output



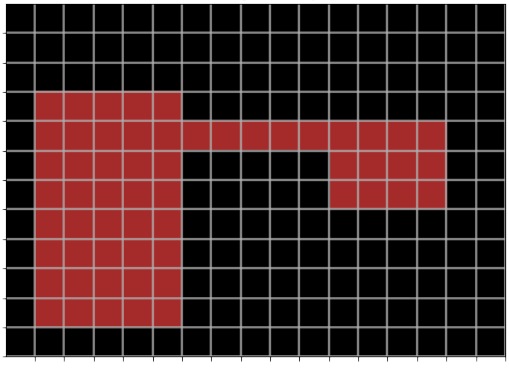
98cf29f8.json Tr Input



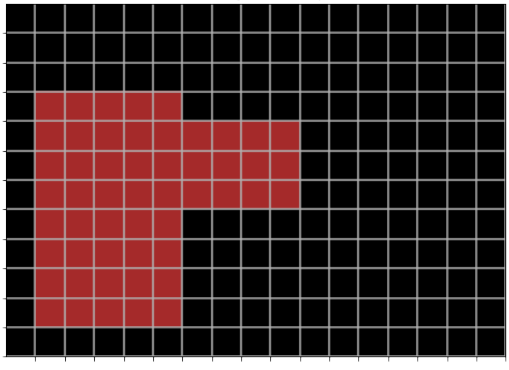
98cf29f8.json Tr Output



98cf29f8.json Te Input

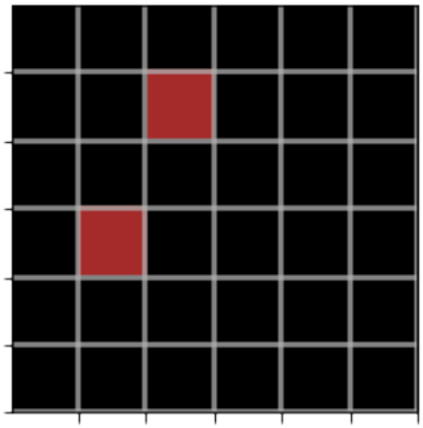


98cf29f8.json Te Output

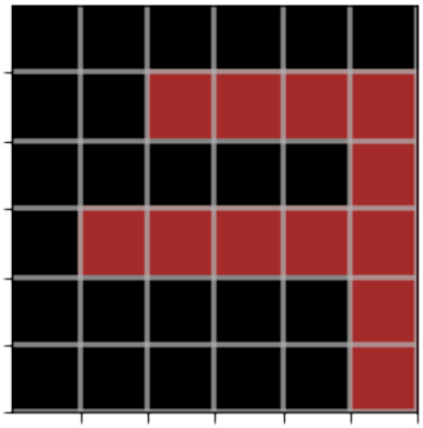


i = 57

99fa7670.json Tr Input



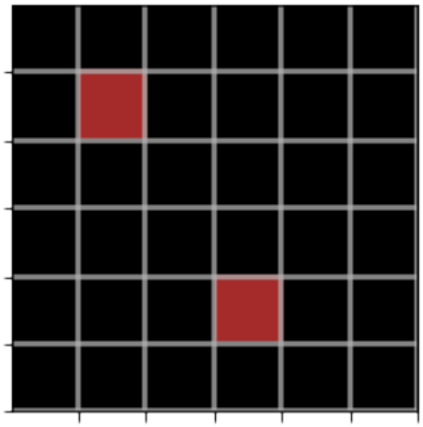
99fa7670.json Tr Output



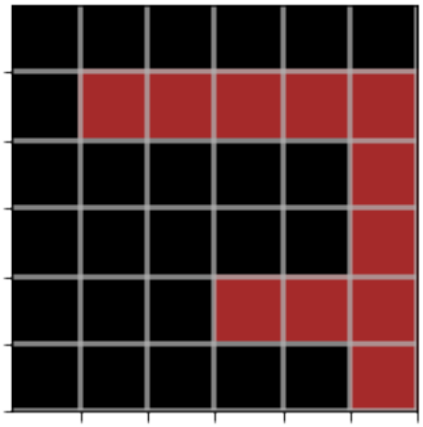
99fa7670.json Tr Input

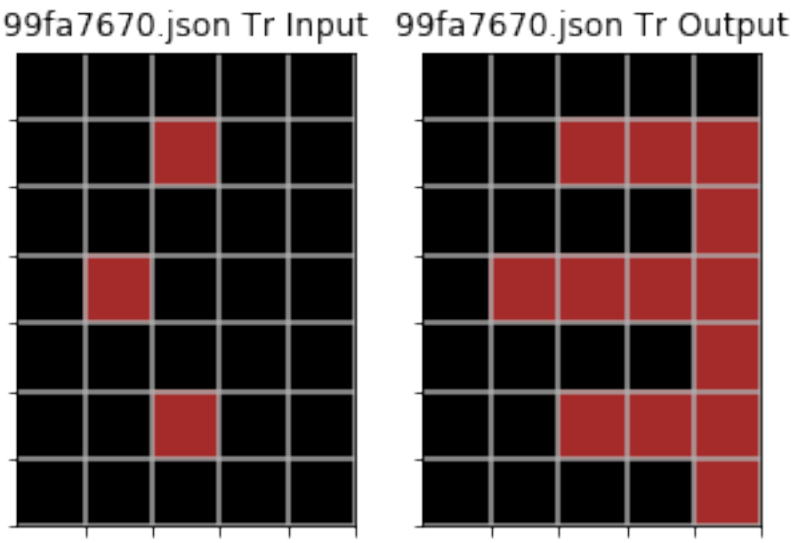
99fa7670.json Tr Output

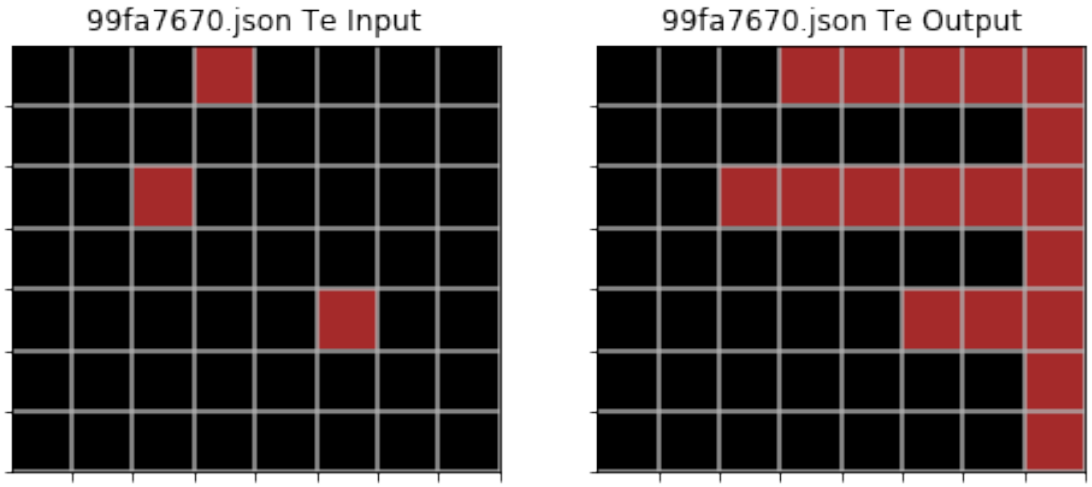
99fa7670.json Tr Input



99fa7670.json Tr Output

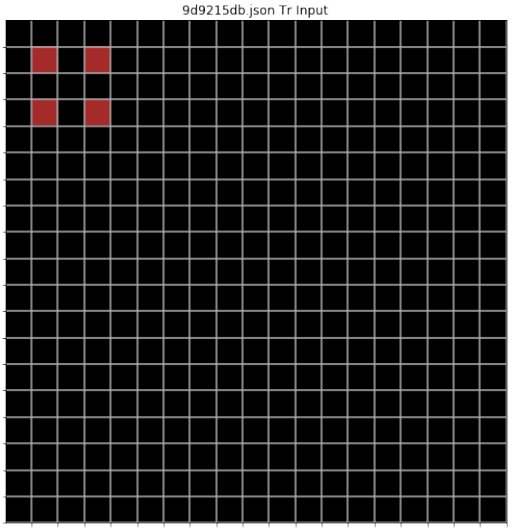



99fa7670.json Tr Input
99fa7670.json Tr Output

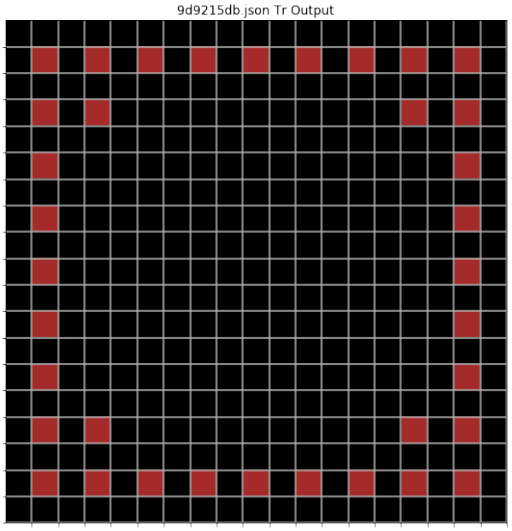

99fa7670.json Te Input
99fa7670.json Te Output

```
i = 58
```

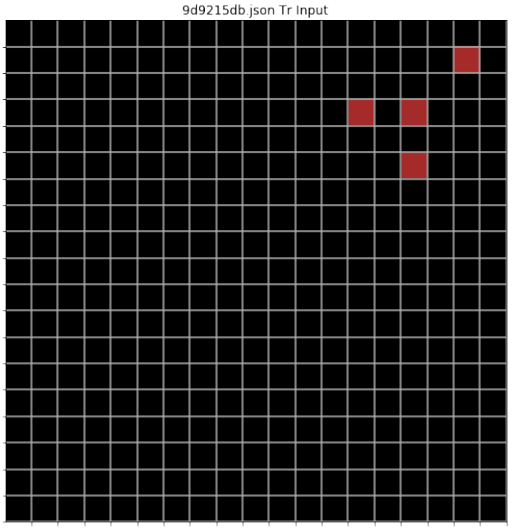
9d9215db json Tr Input



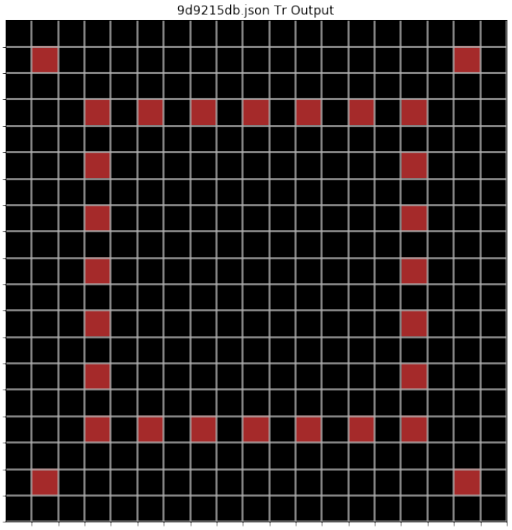
9d9215db json Tr Output

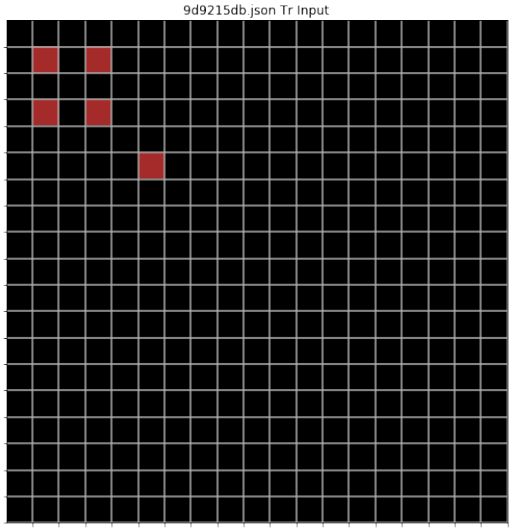


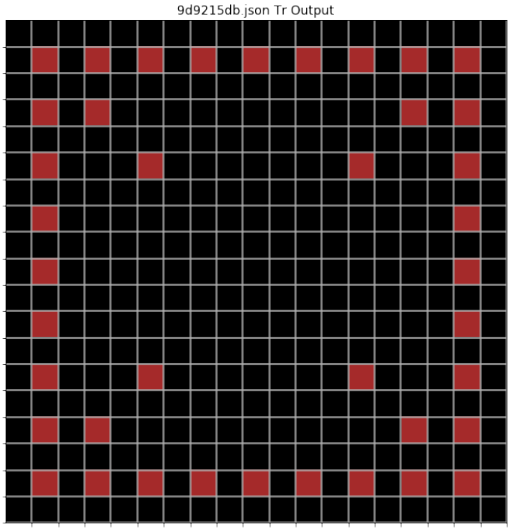
9d9215db json Tr Input

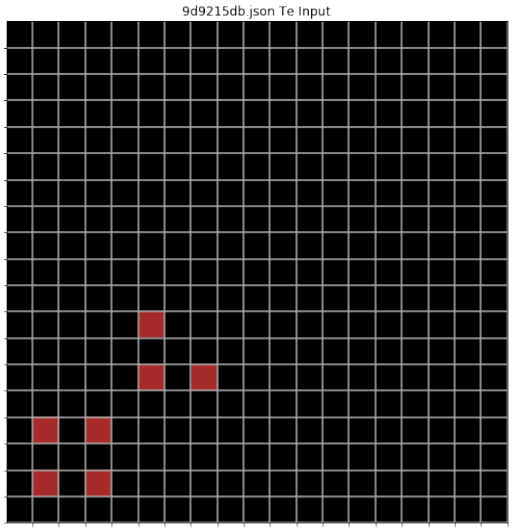


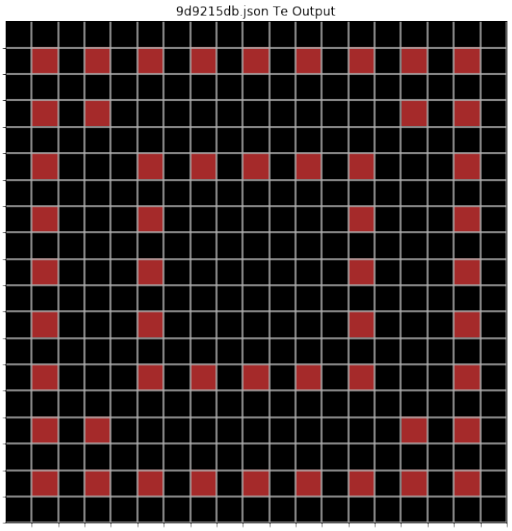
9d9215db json Tr Output





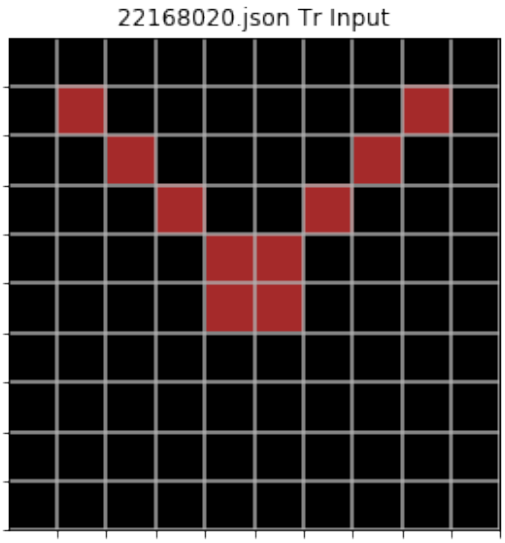


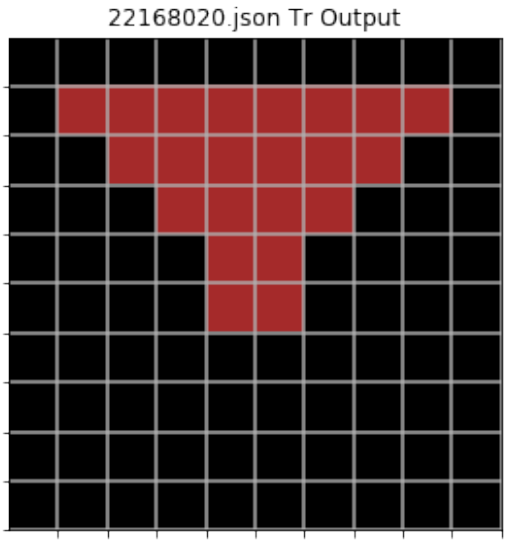


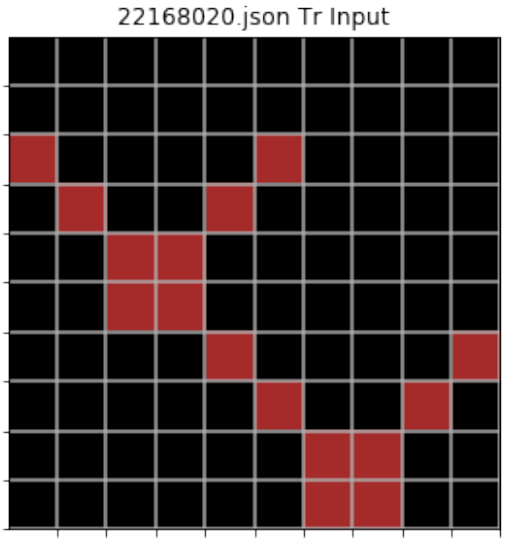


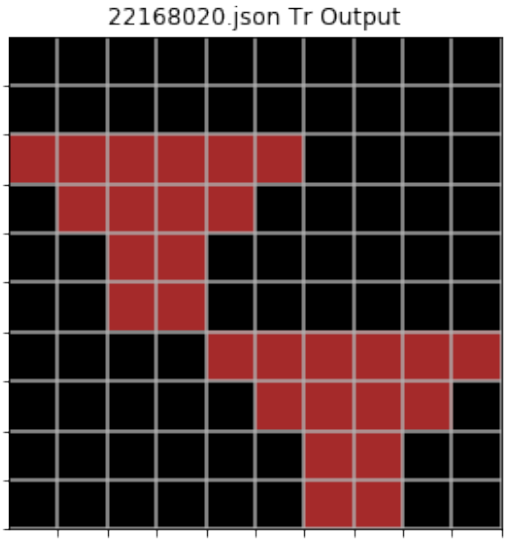

```
In [16]: print('Visualizing files in mini testing')
         i = 0
         for filename in onlyfiles_test:
             print(f'i = {i}')
             train_list, test_list = read_single_training_example(filename)
             show_single_training_example_visually(train_list, test_list, filename, removeColo
             i += 1

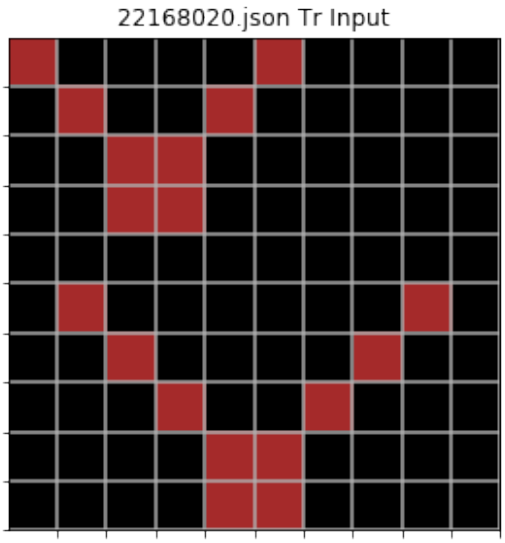
Visualizing files in mini testing
i = 0
```

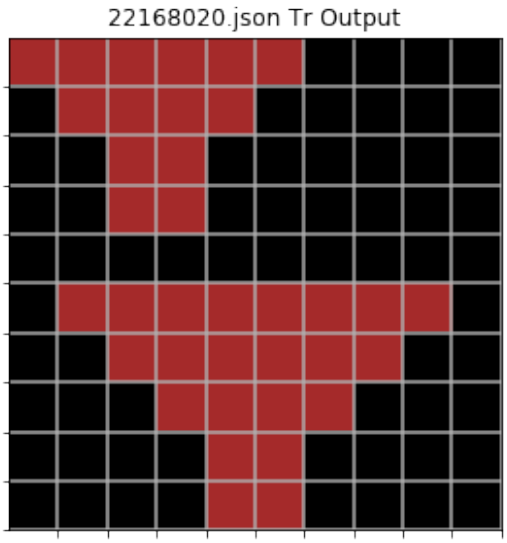

22168020.json Tr Input

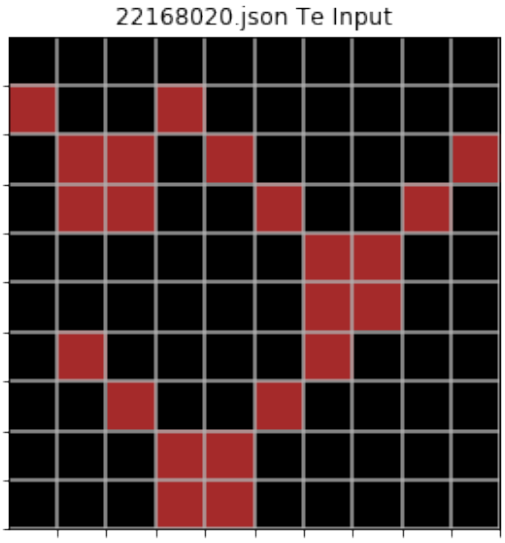

22168020.json Tr Output

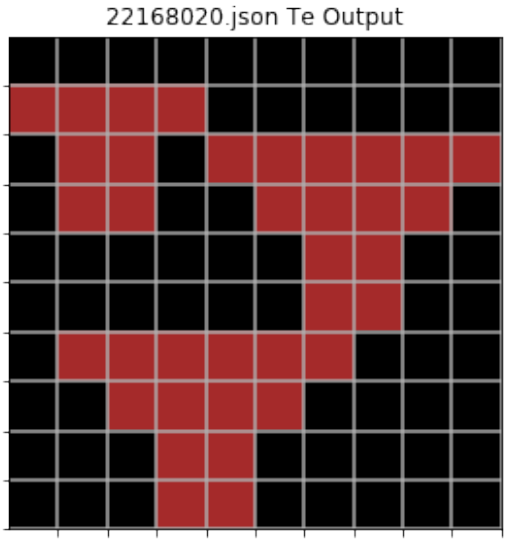

22168020.json Tr Input


22168020.json Tr Output


22168020.json Tr Input

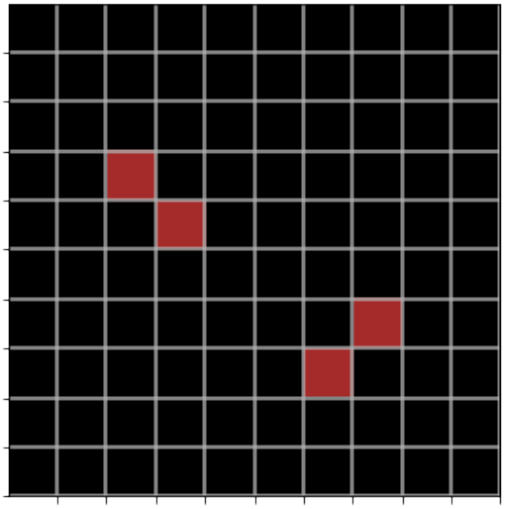

22168020.json Tr Output


22168020.json Te Input

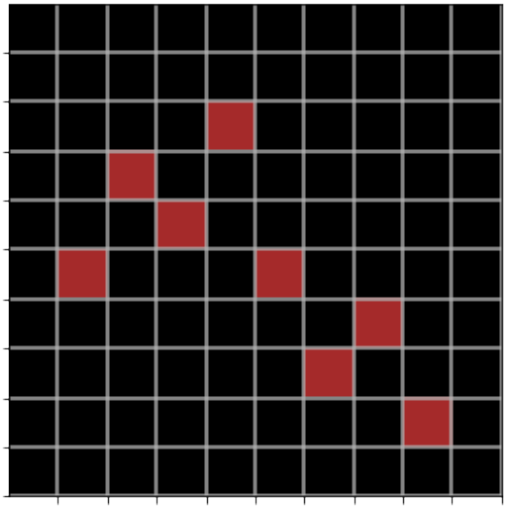

22168020.json Te Output

```
i = 1
```

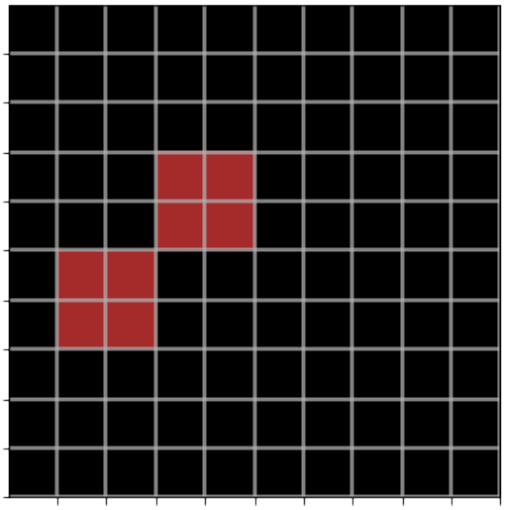
22233c11.json Tr Input



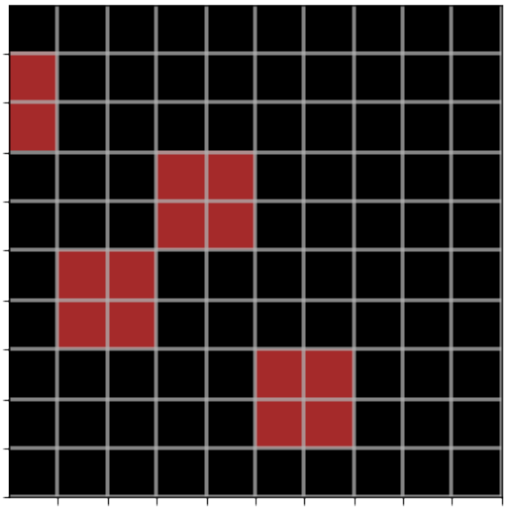
22233c11.json Tr Output

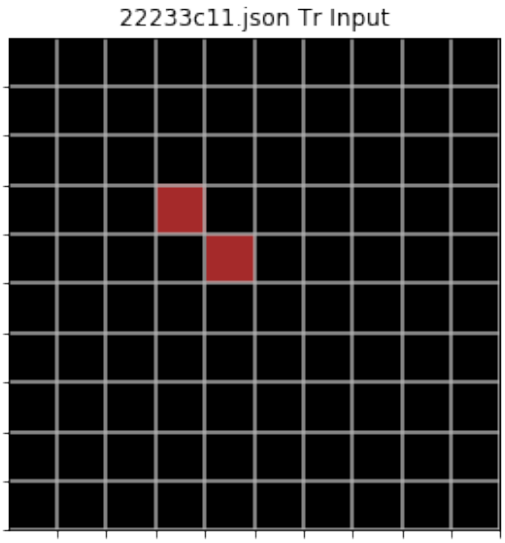


22233c11.json Tr Input



22233c11.json Tr Output

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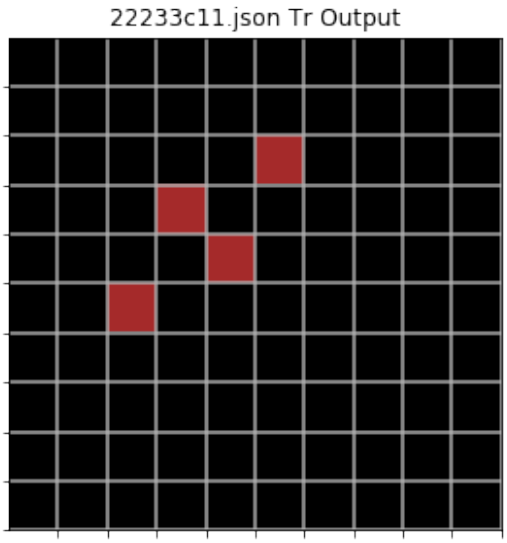
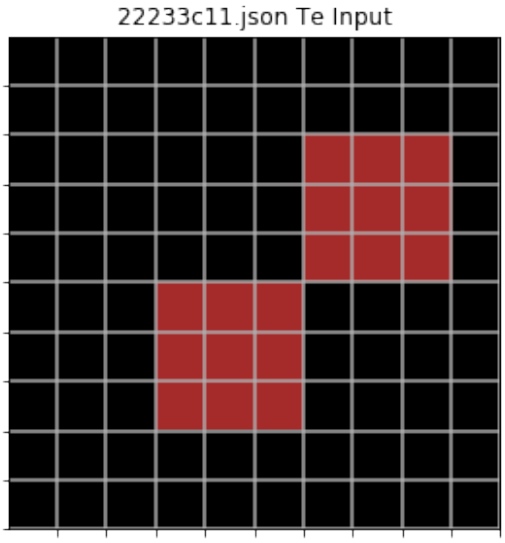

22233c11.json Tr Output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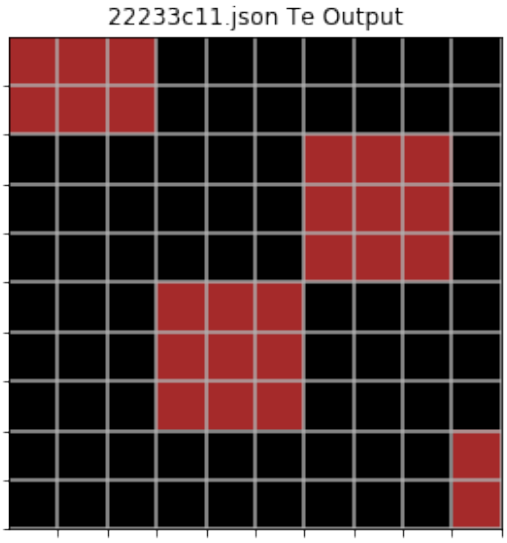
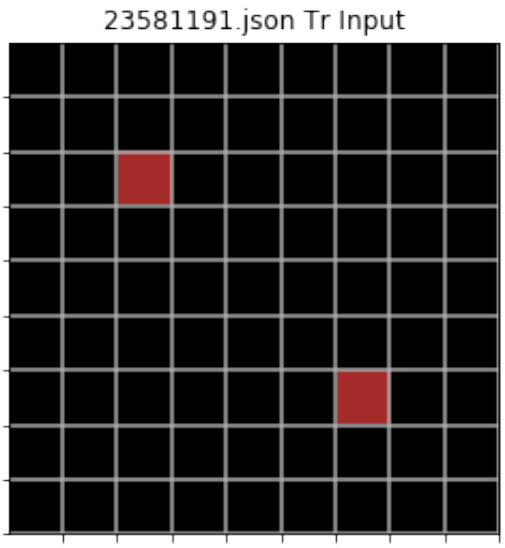
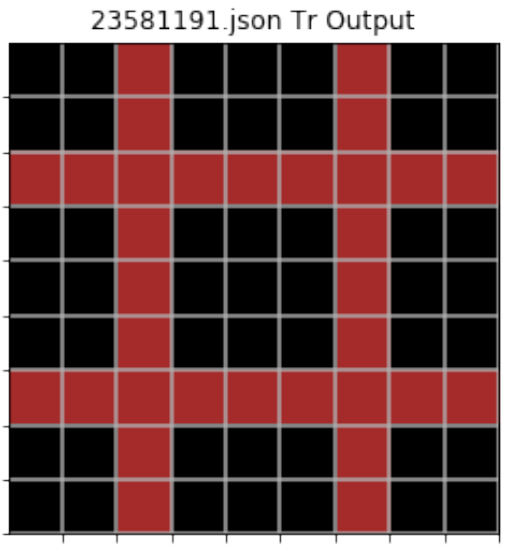
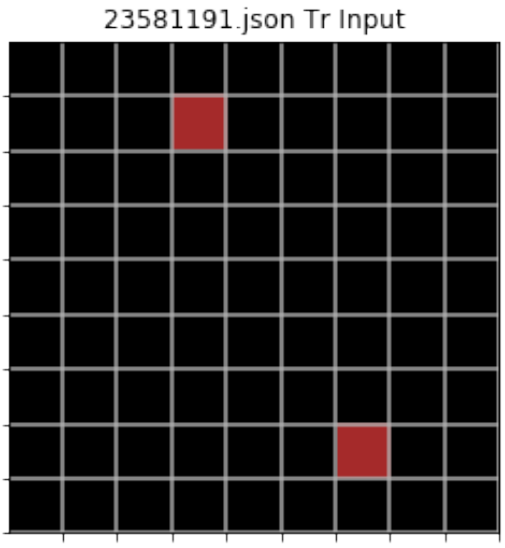
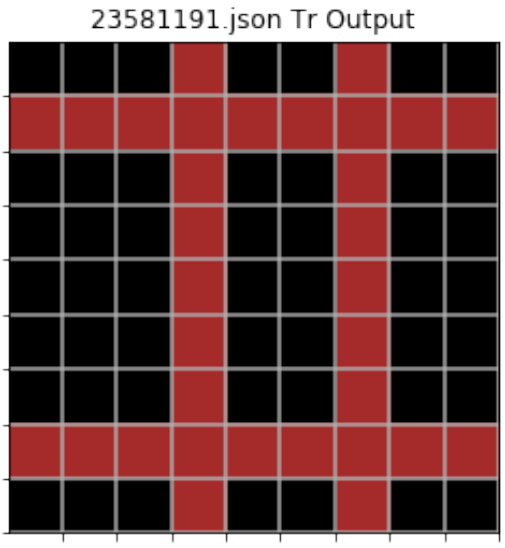

22233c11.json Te Output

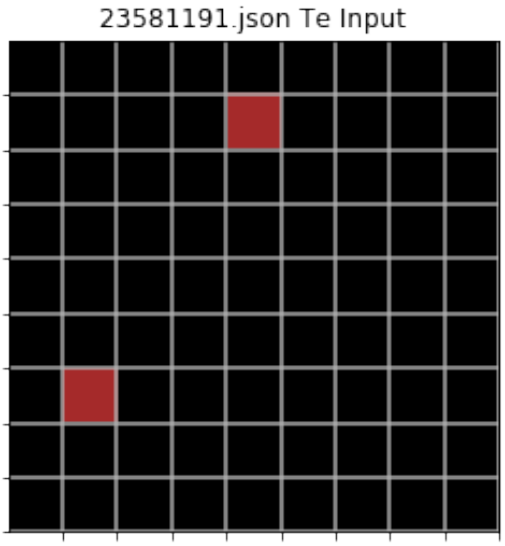
```
i = 2
```

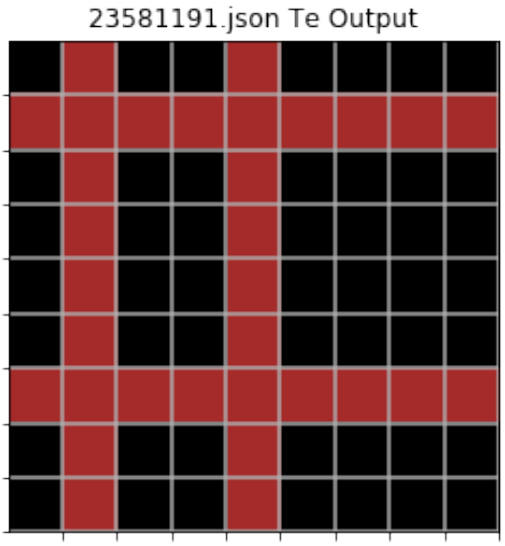

23581191.json Tr Input


23581191.json Tr Output

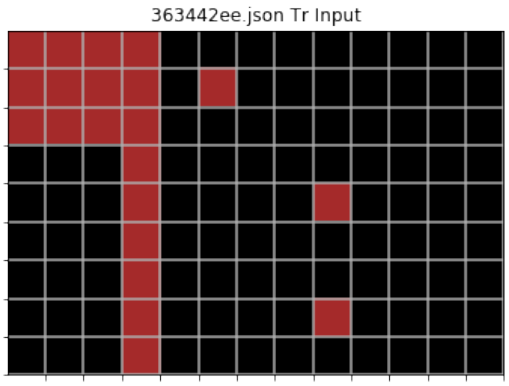

23581191.json Tr Input

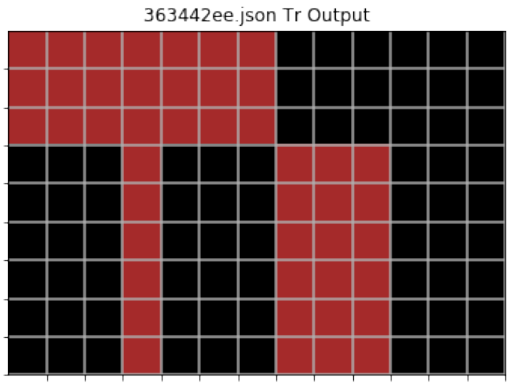

23581191.json Tr Output


23581191.json Te Input


23581191.json Te Output

i = 3


363442ee.json Tr Input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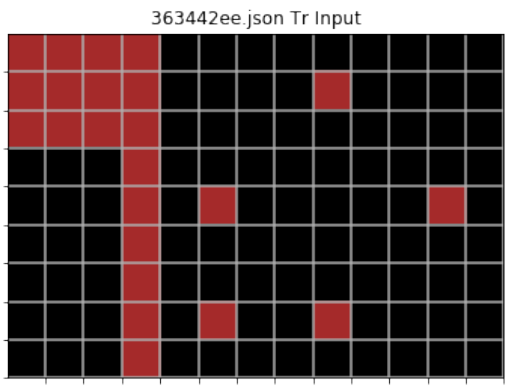
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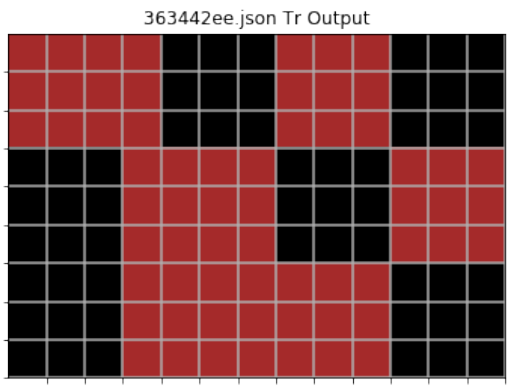
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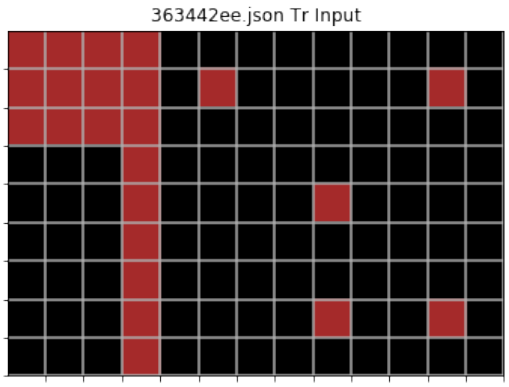
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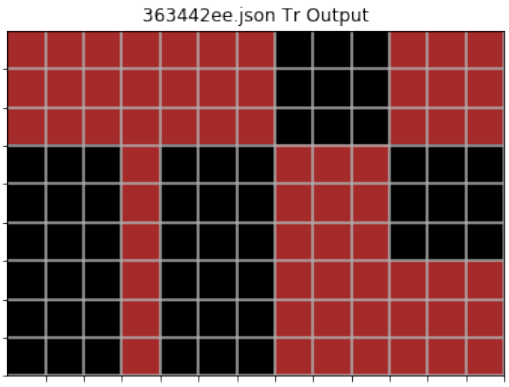
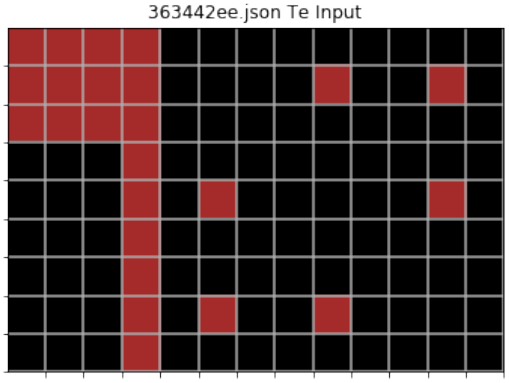
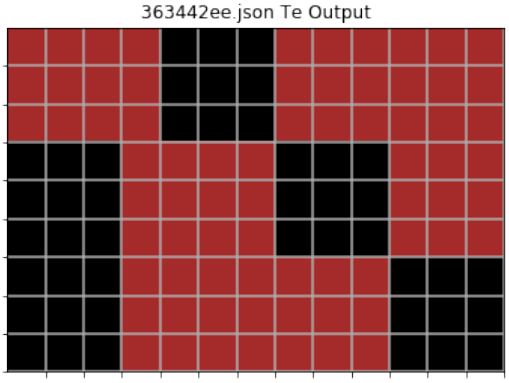
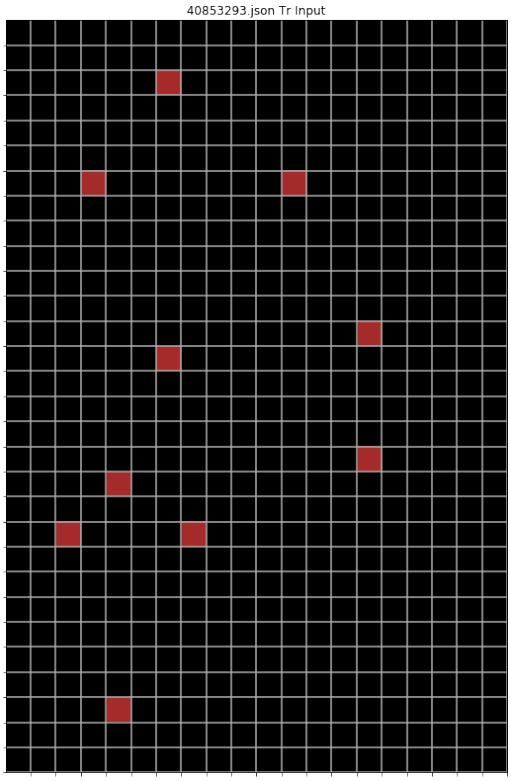
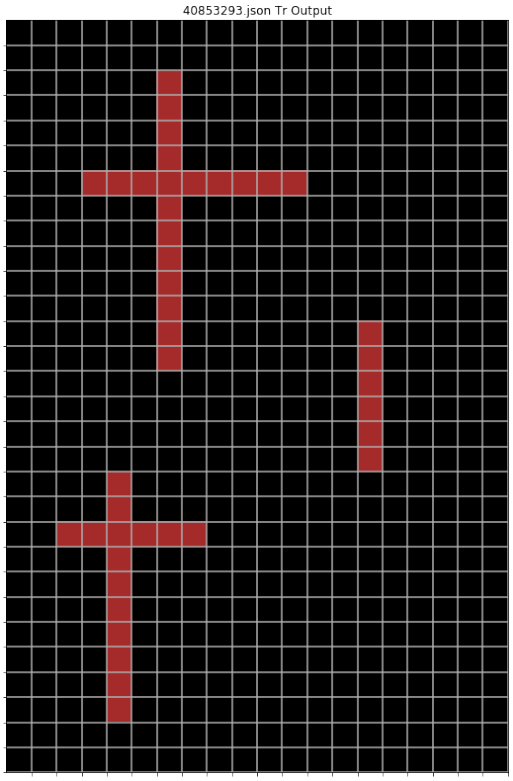

363442ee.json Tr Output


363442ee.json Te Input

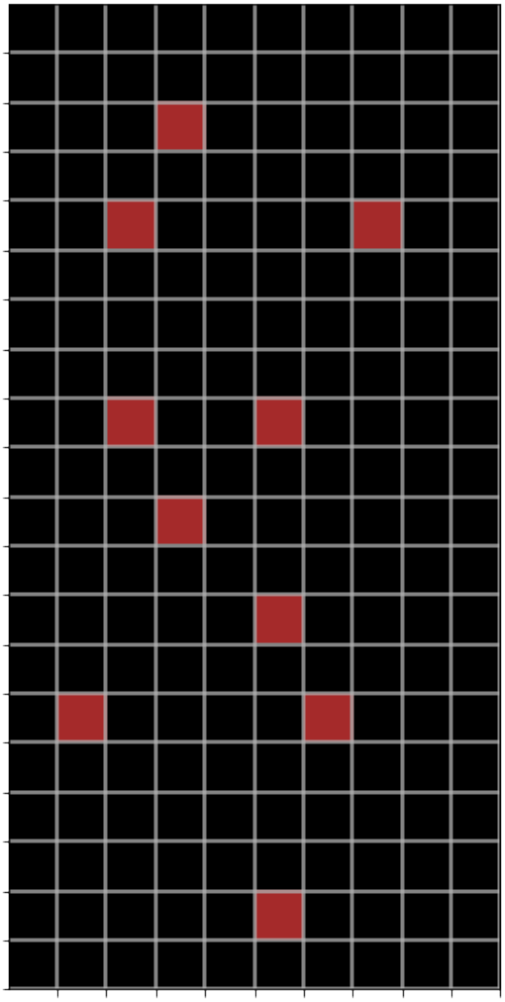

363442ee.json Te Output

```
i = 4
```


40853293.json Tr Input


40853293.json Tr Output

40853293.json Tr Input



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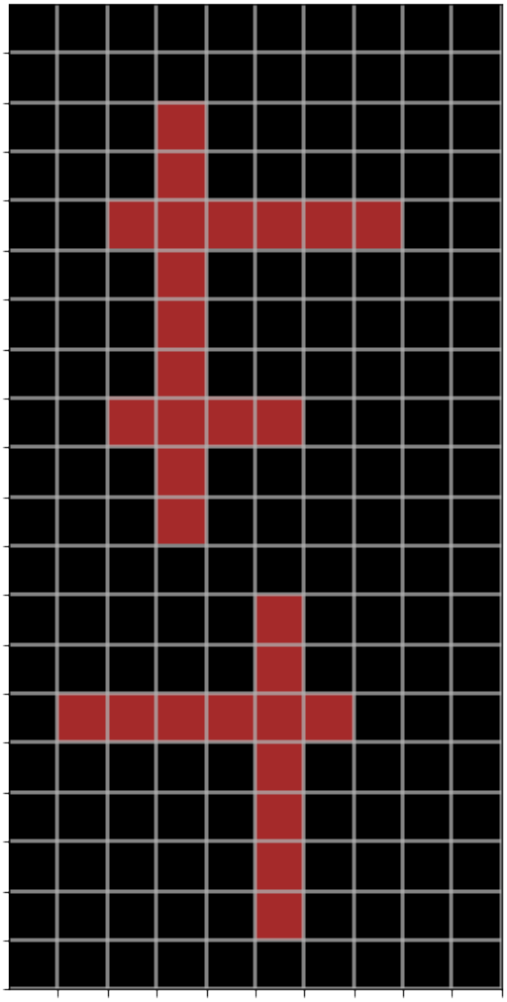
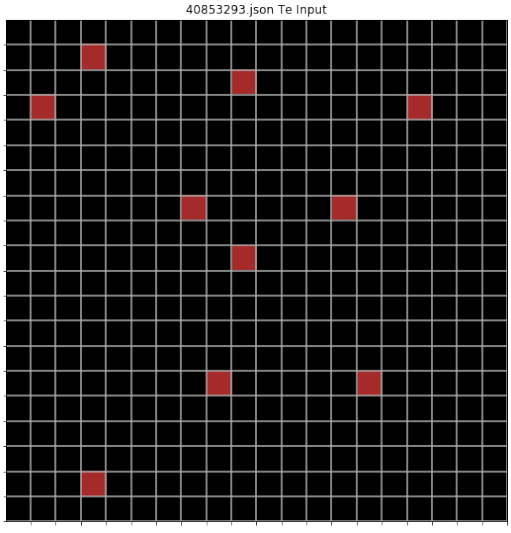
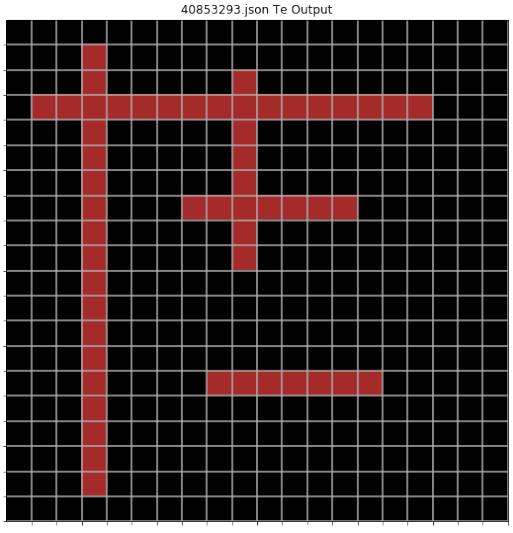


40853293.json Te Input



40853293.json Te Output



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i = 5
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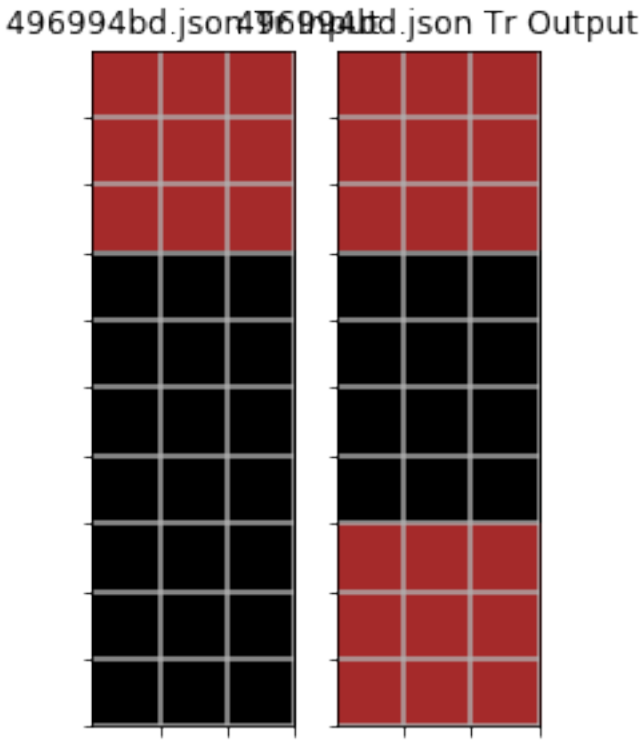
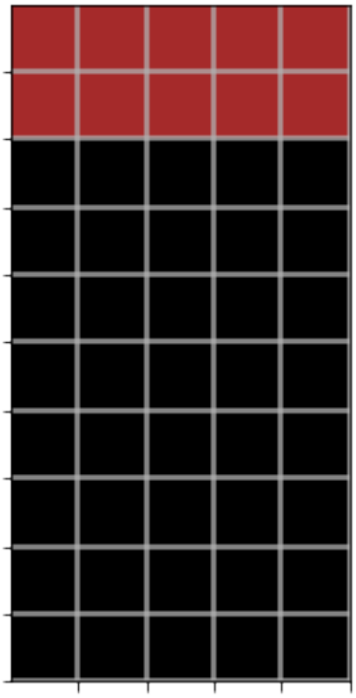
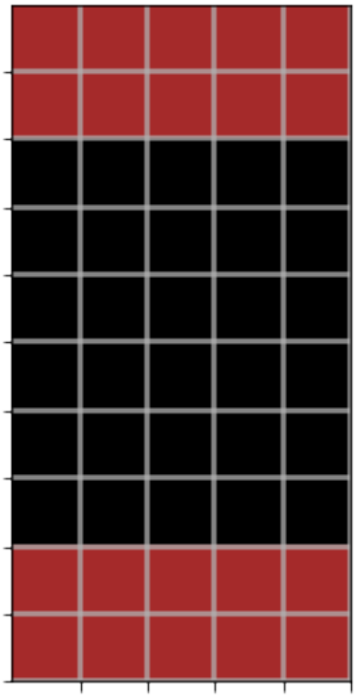


496994bd.json Tr Input



496994bd.json Tr Output



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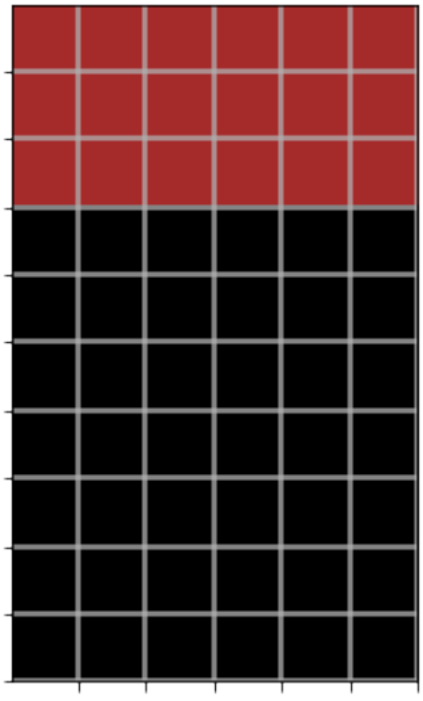

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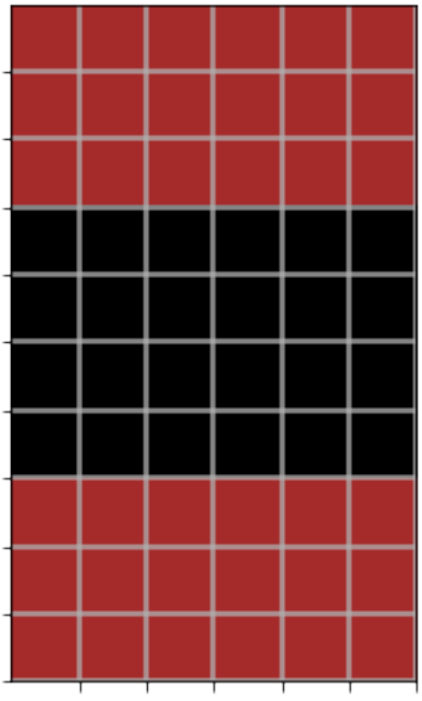
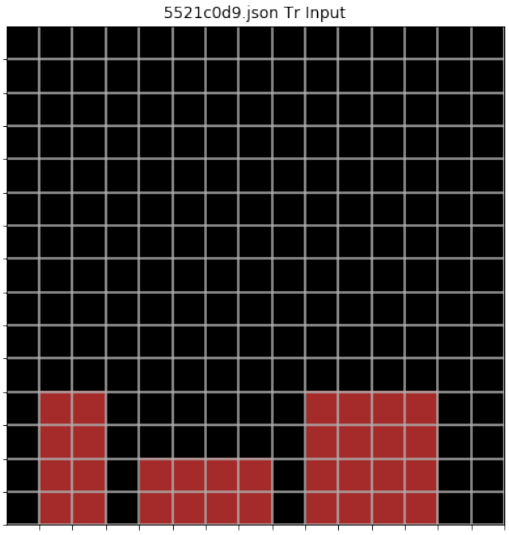
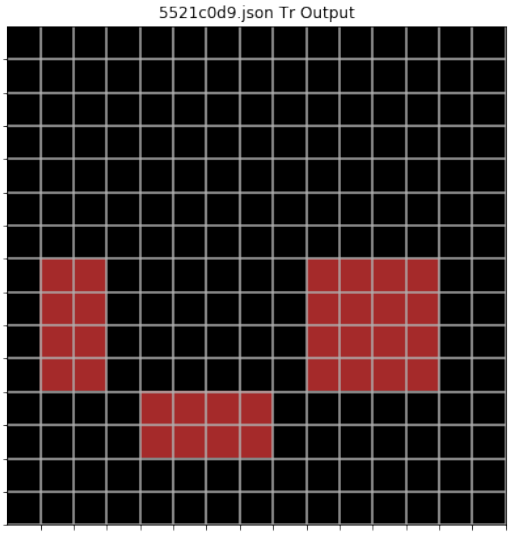
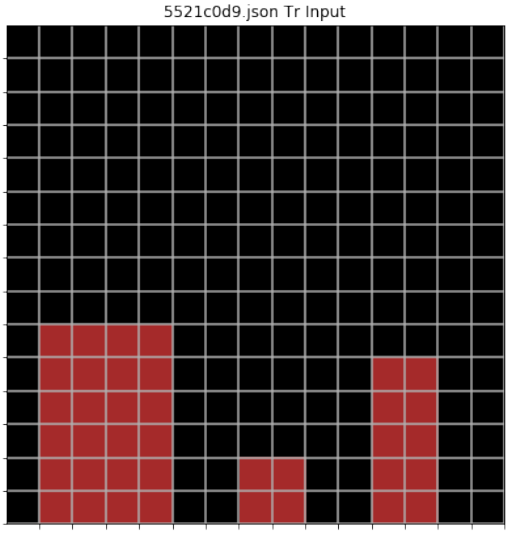
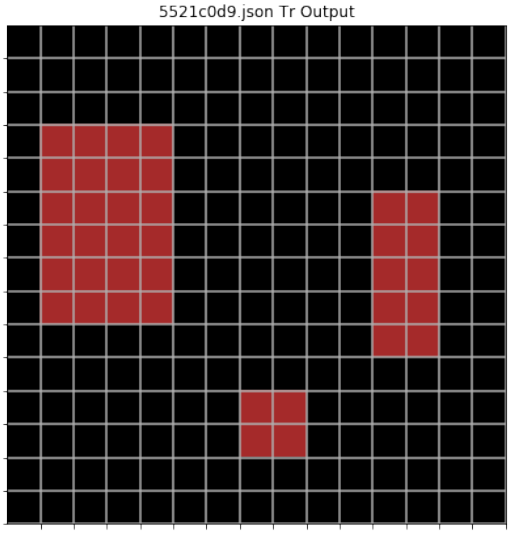


i = 6


5521c0d9.json Tr Input


5521c0d9.json Tr Output


5521c0d9.json Tr Input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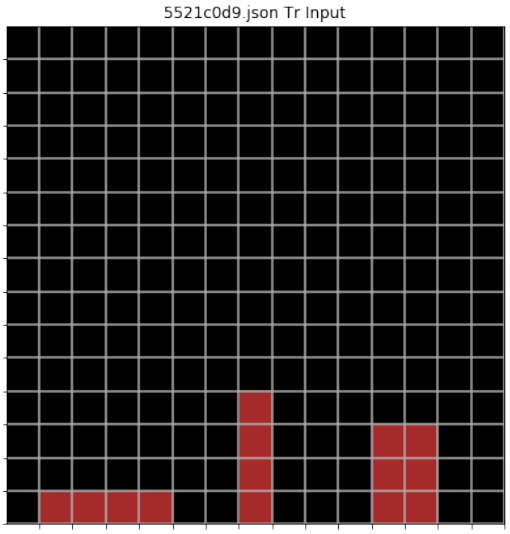
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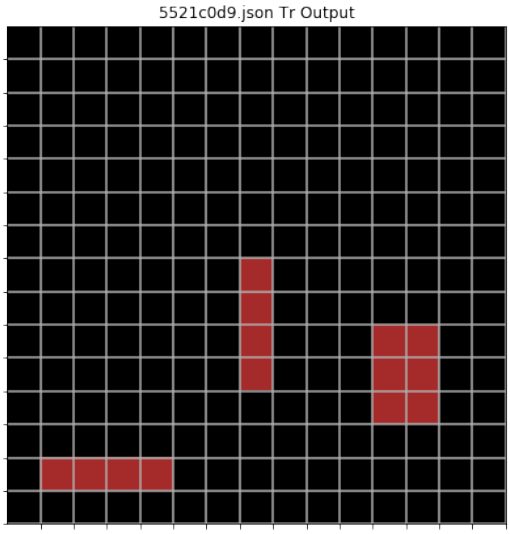
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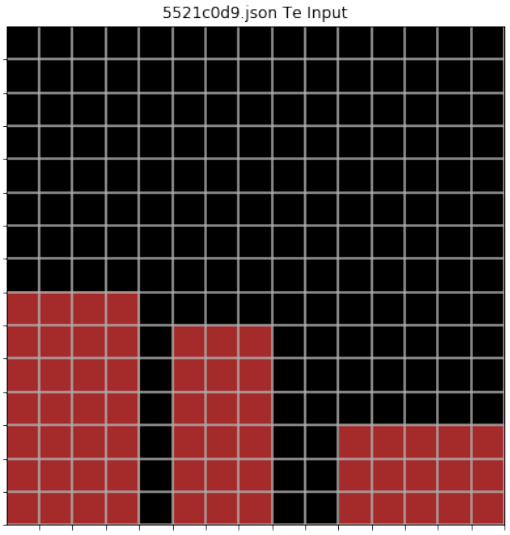
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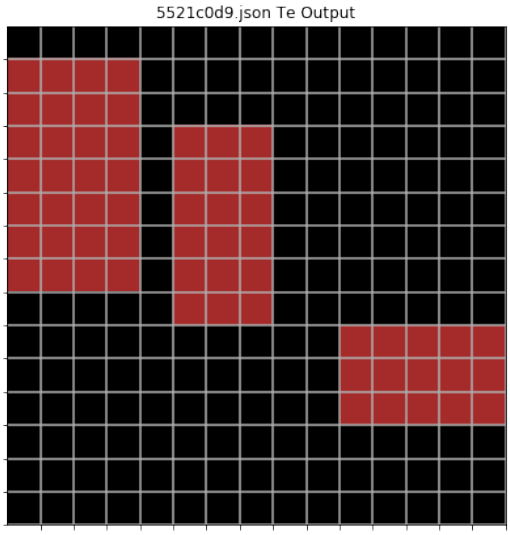
5521c0d9.json Te Output

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i = 7
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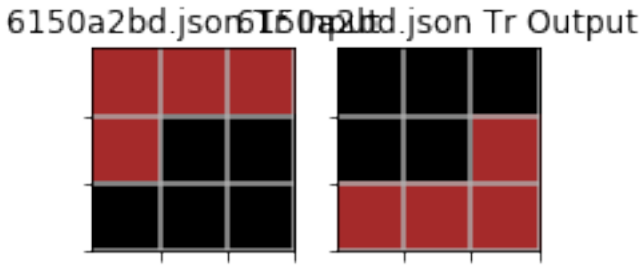
6150a2bd.json Tr Output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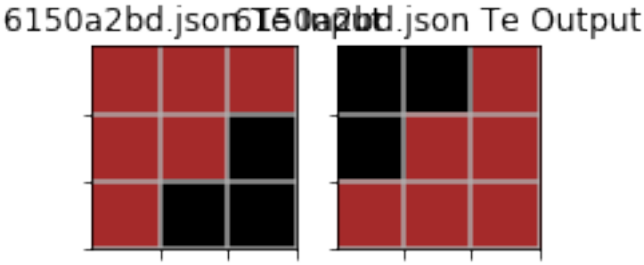
6150a2bd.json Tr Output


6150a2bd.json Te Input
6150a2bd.json Te Output

```
i = 8
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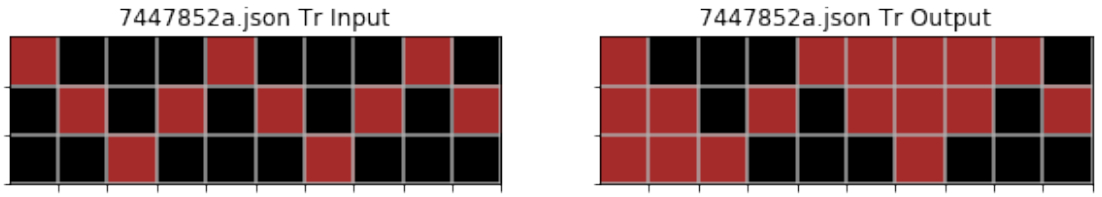
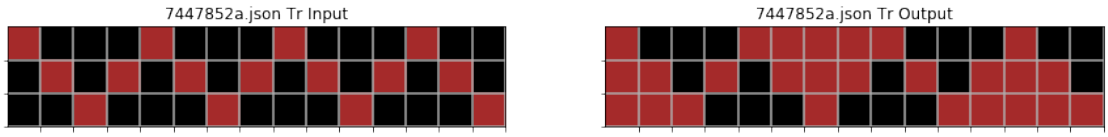
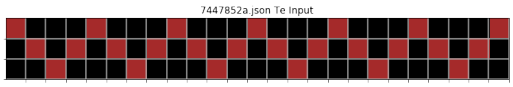

7447852a.json Tr Input
7447852a.json Tr Output


7447852a.json Tr Input
7447852a.json Tr Output

7447852a.json Tr Input
7447852a.json Tr Output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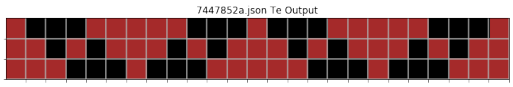
7447852a.json Te Output

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i = 9
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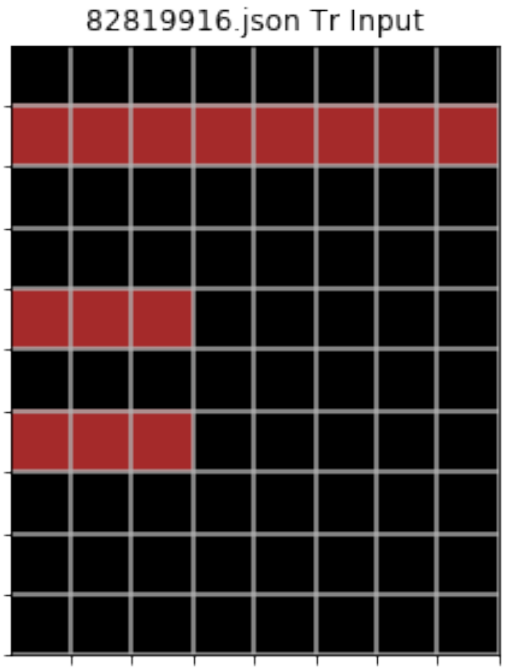
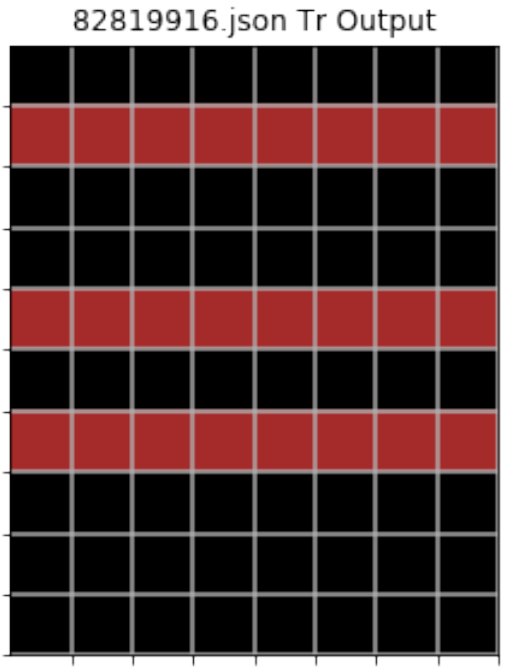
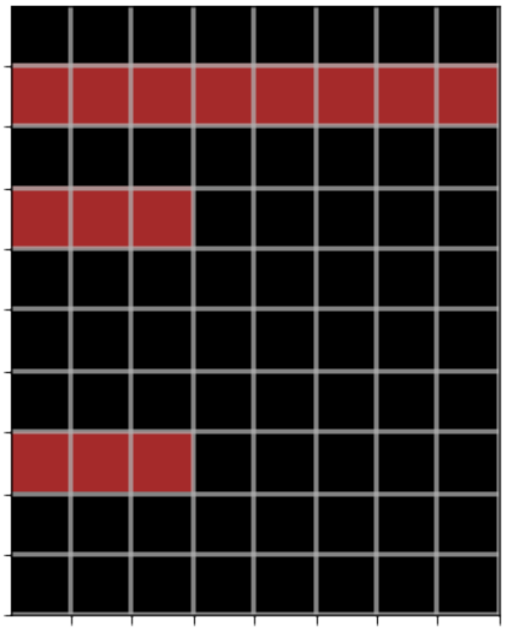
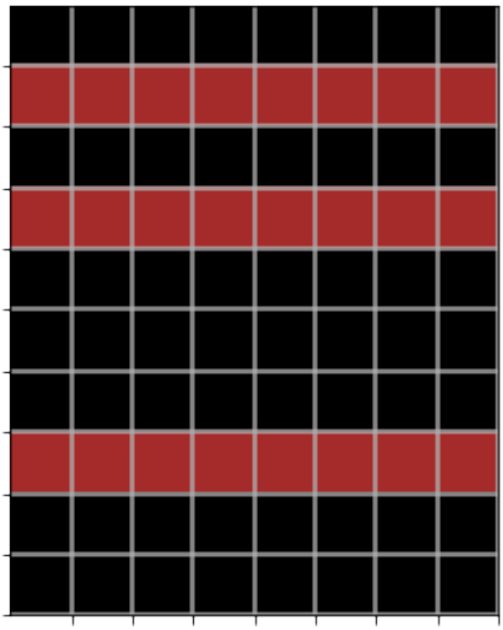

82819916.json Tr Input


82819916.json Tr Output

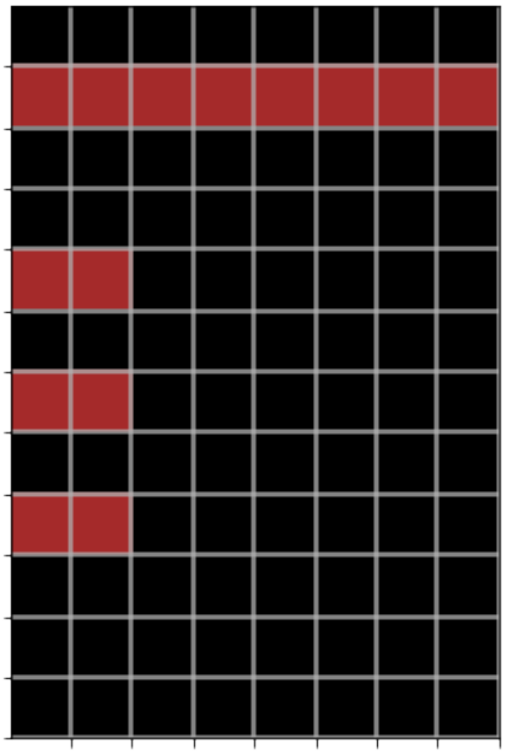
82819916.json Tr Input



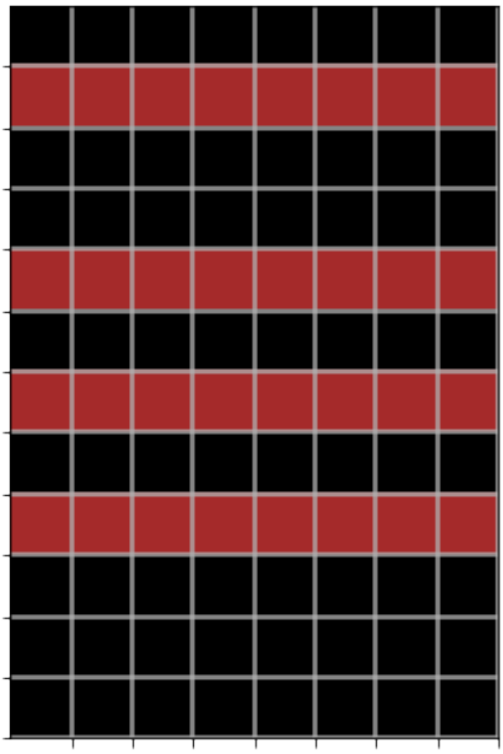
82819916.json Tr Output

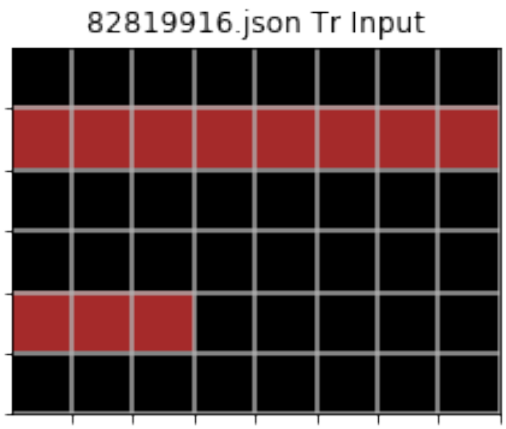


82819916.json Tr Input



82819916.json Tr Output

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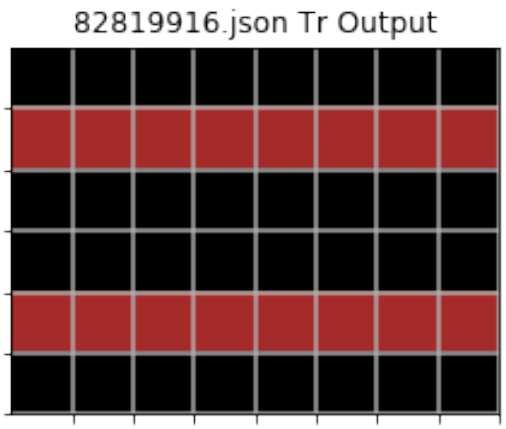
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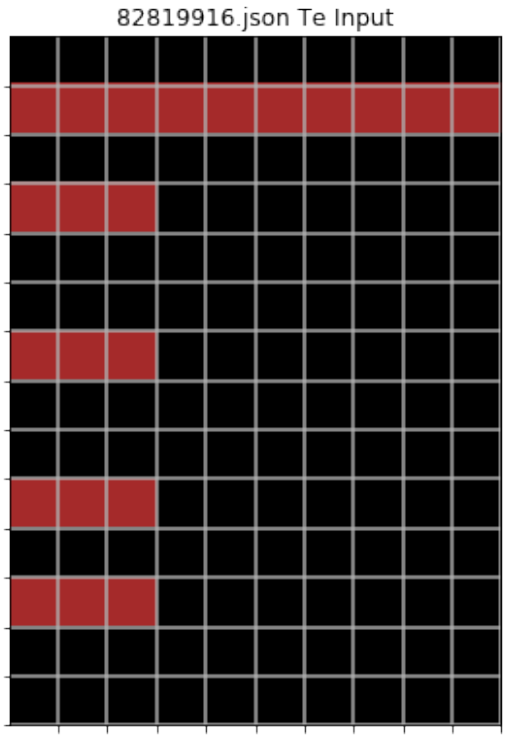
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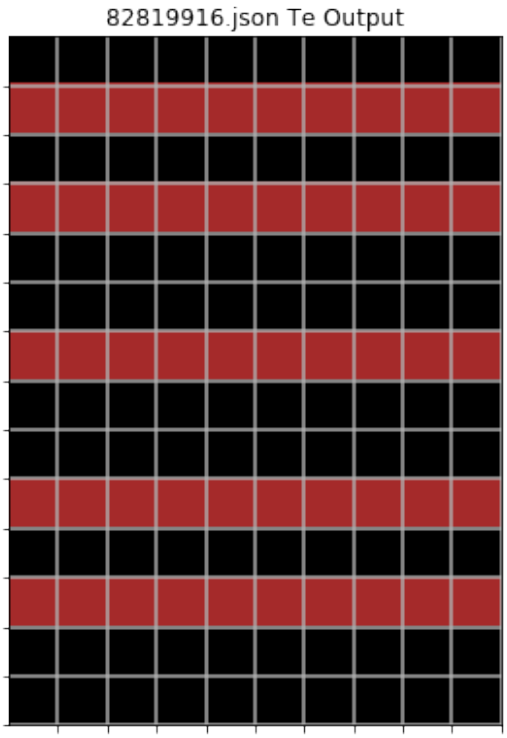
82819916.json Te Output

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i = 10
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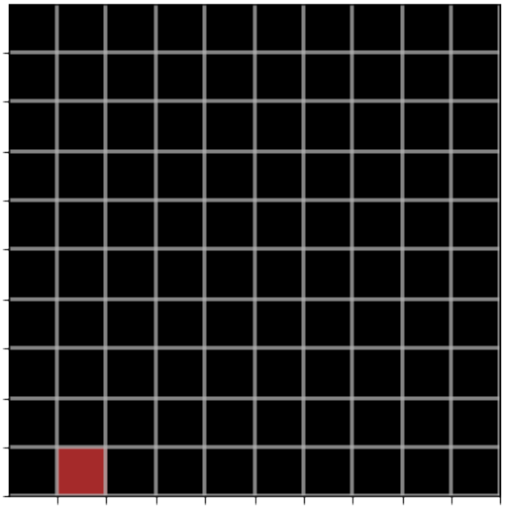
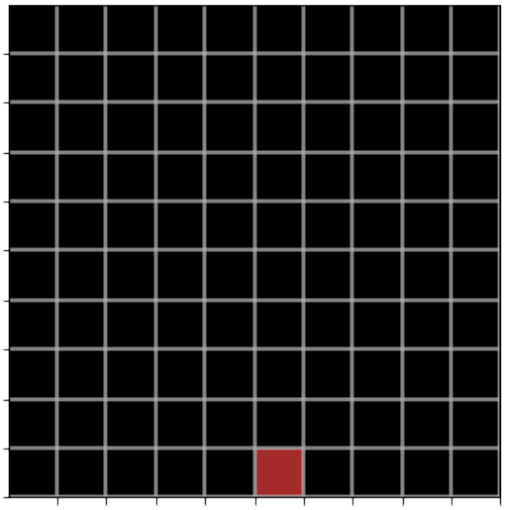
8403a5d5.json Tr Input

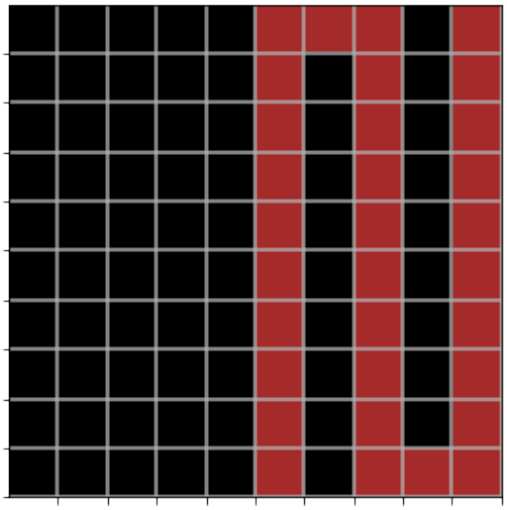


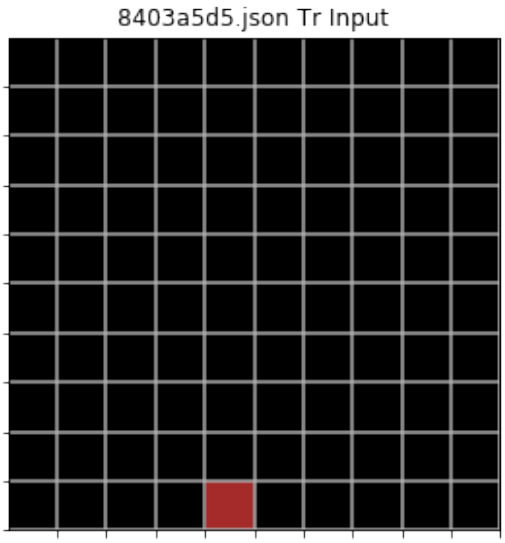
8403a5d5.json Tr Output

8403a5d5.json Tr Input



8403a5d5.json Tr Output

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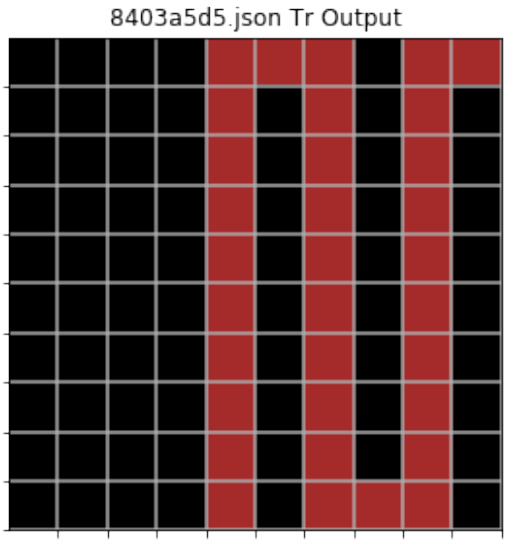
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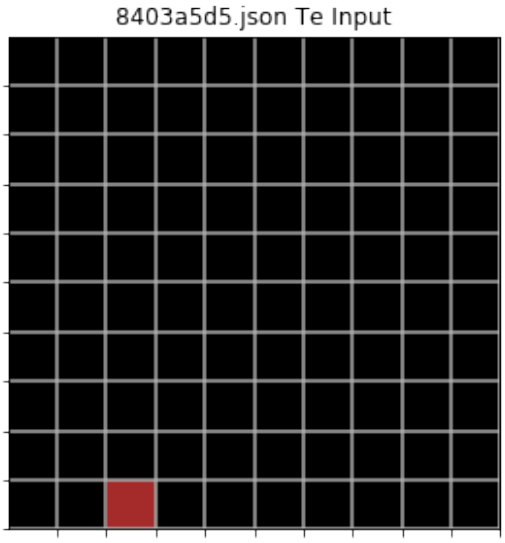
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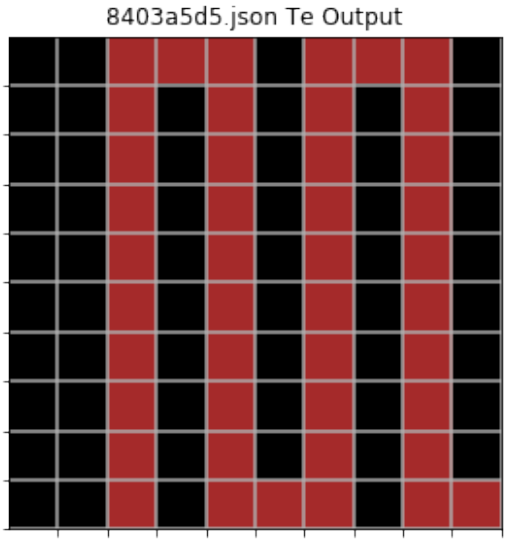
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i = 11
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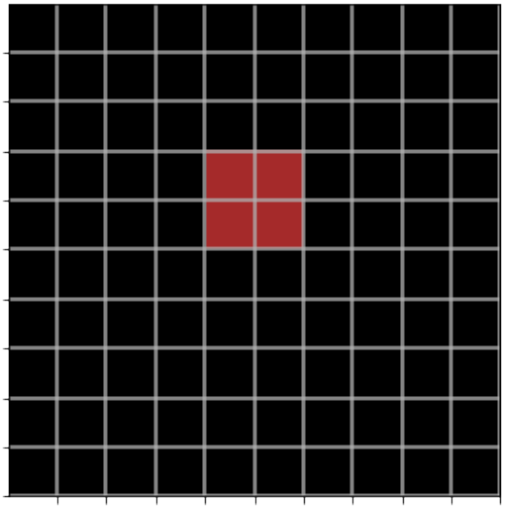
95990924.json Tr Input



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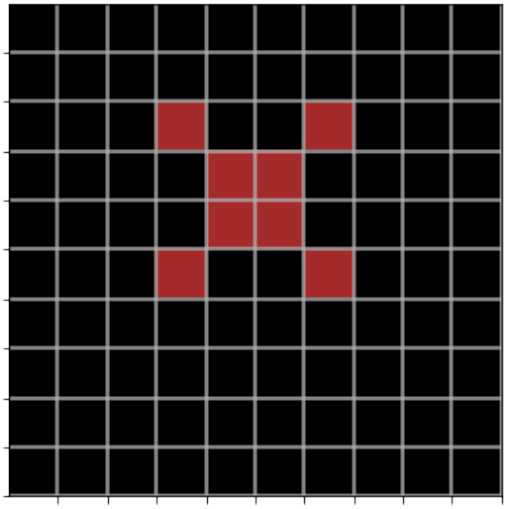
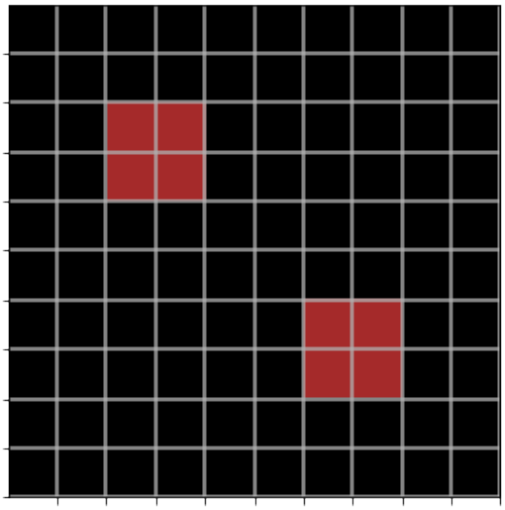


95990924.json Tr Input



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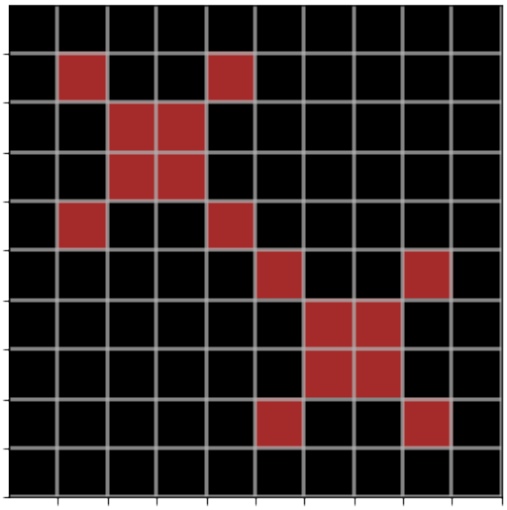

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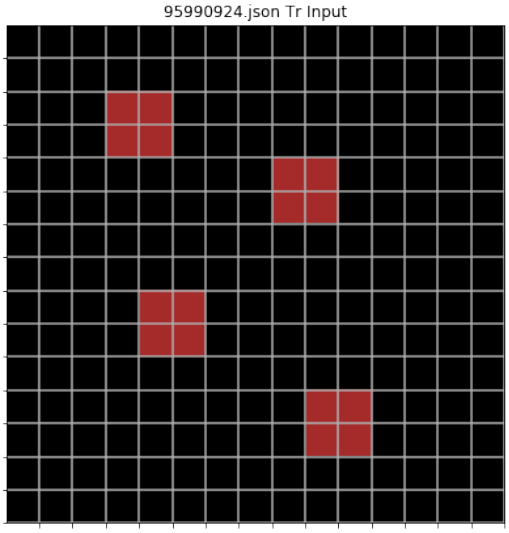

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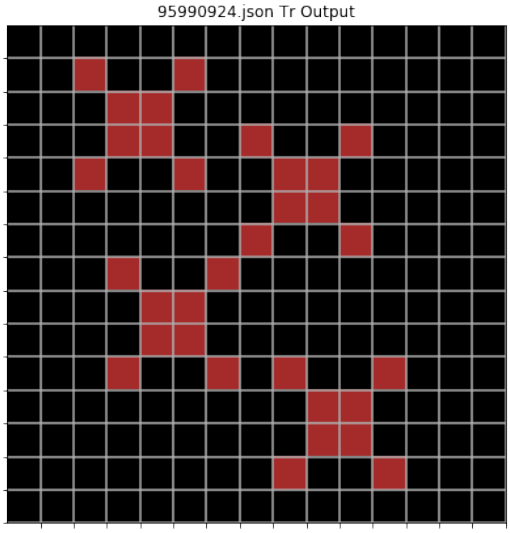
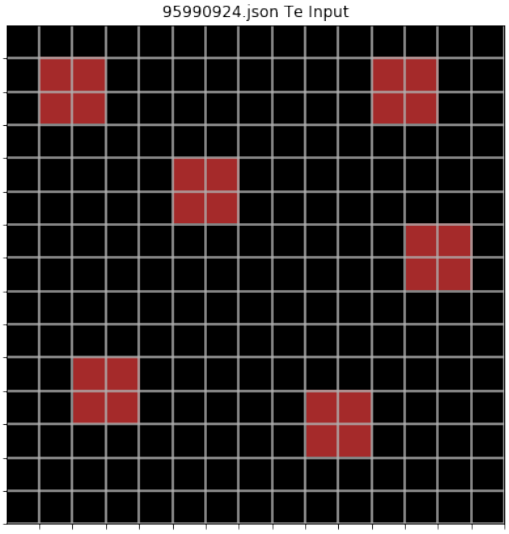
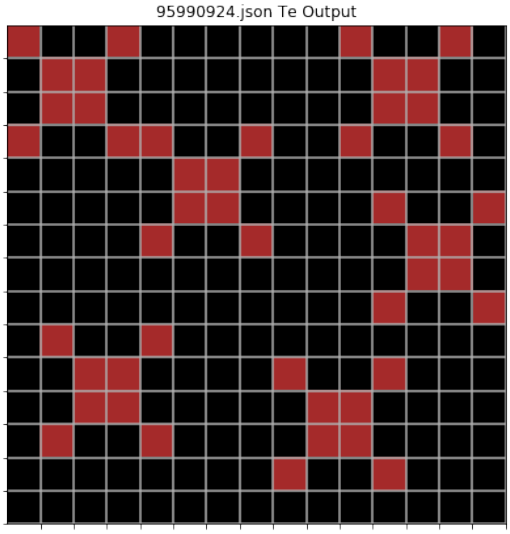


95990924.json Te Input

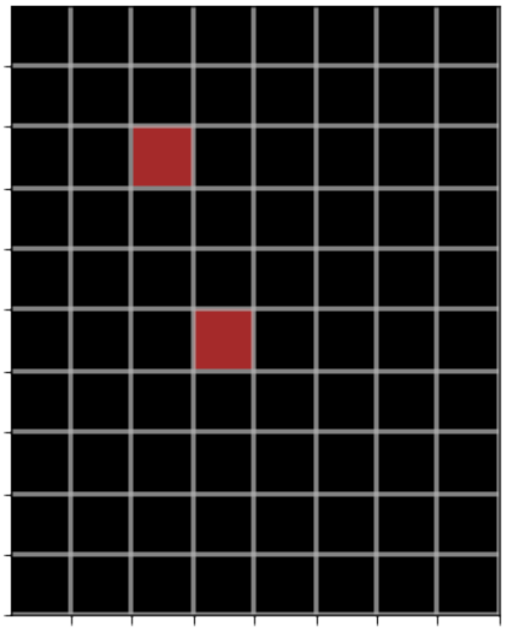


95990924.json Te Output



i = 12

97999447.json Tr Input



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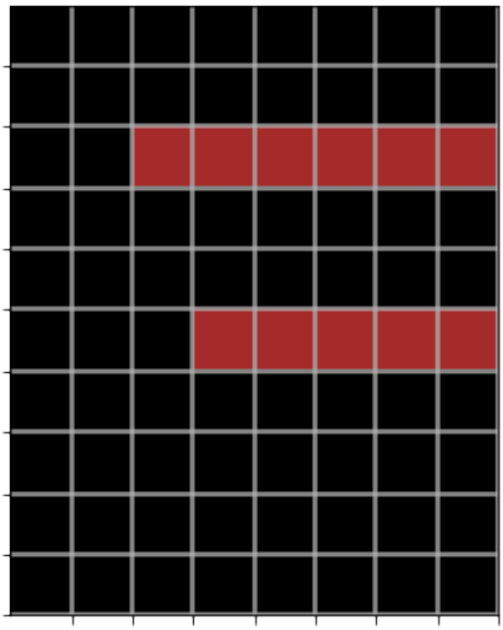

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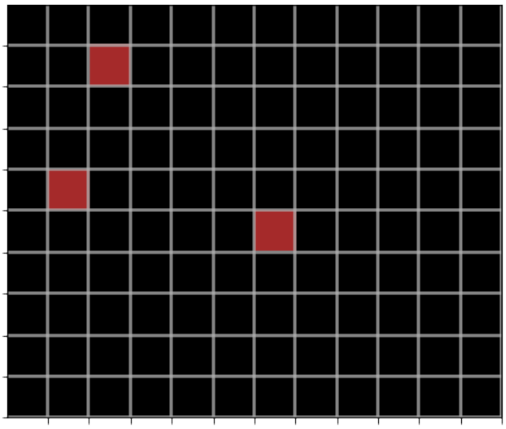
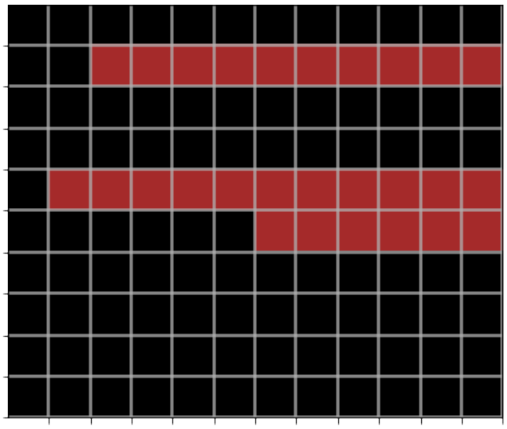
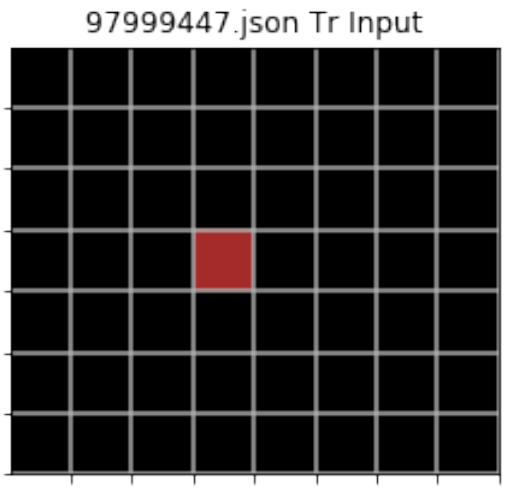


97999447.json Tr Output

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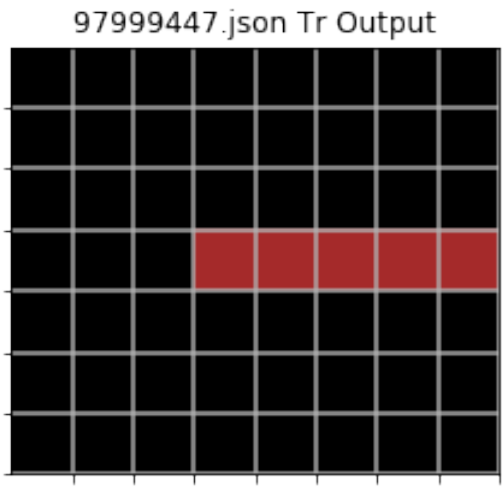
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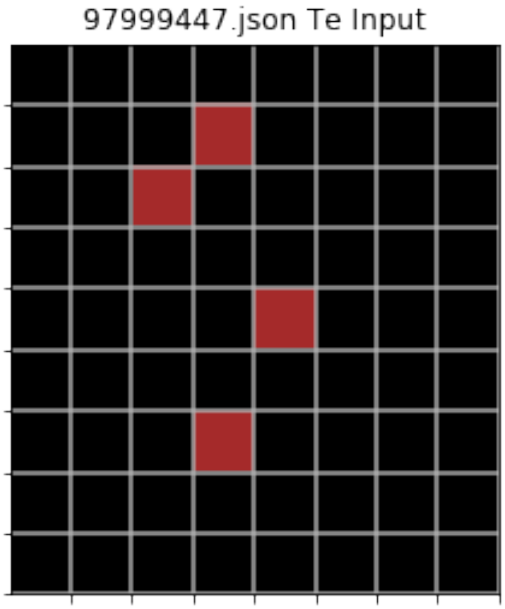
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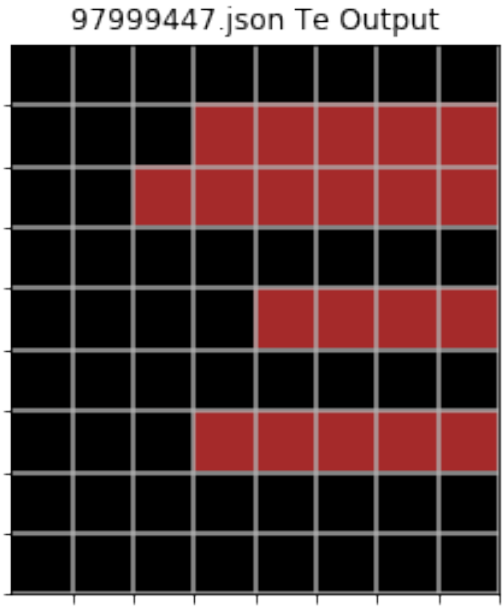
97999447.json Te Output

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i = 13
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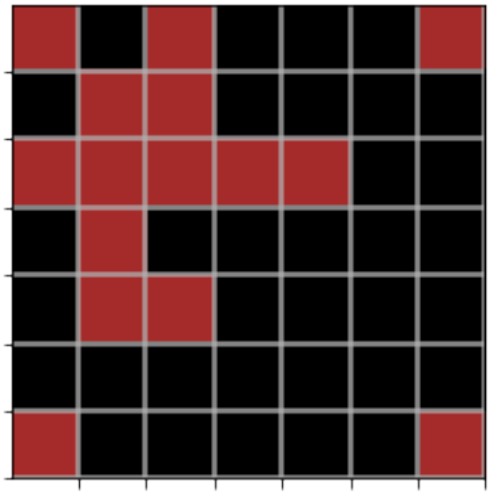
a1570a43.json Tr Input



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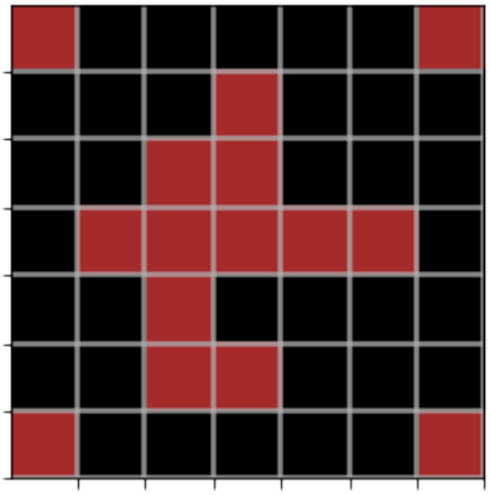

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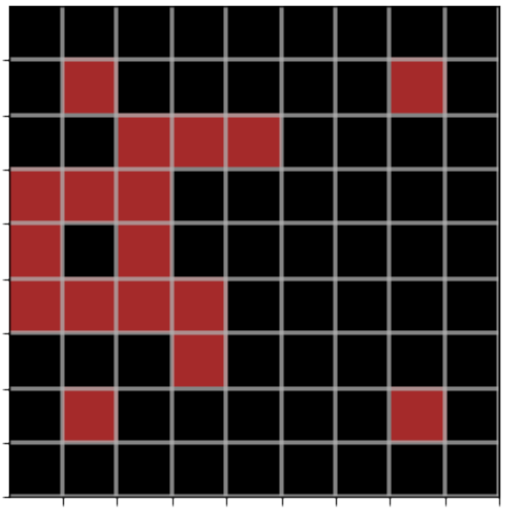

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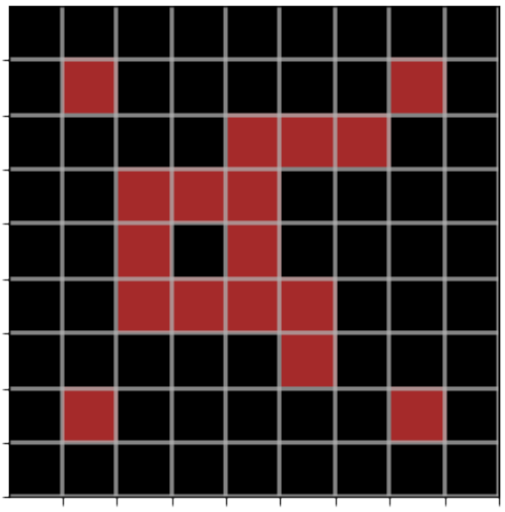

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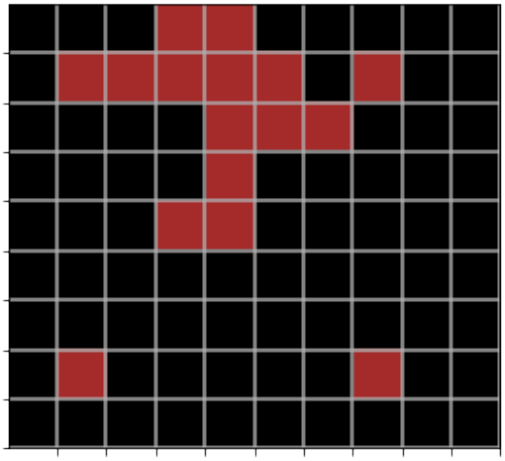

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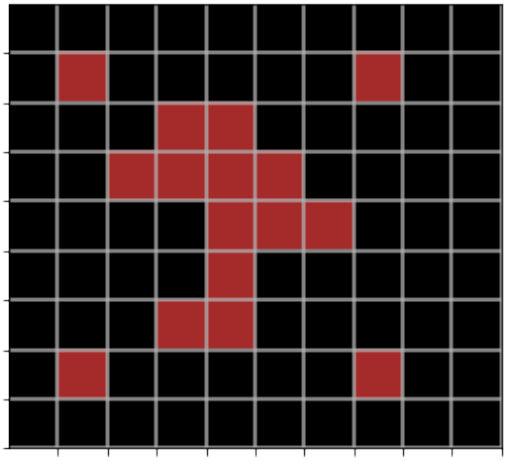

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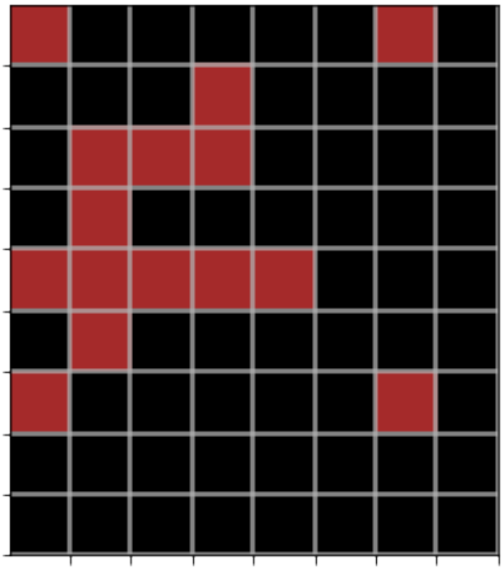

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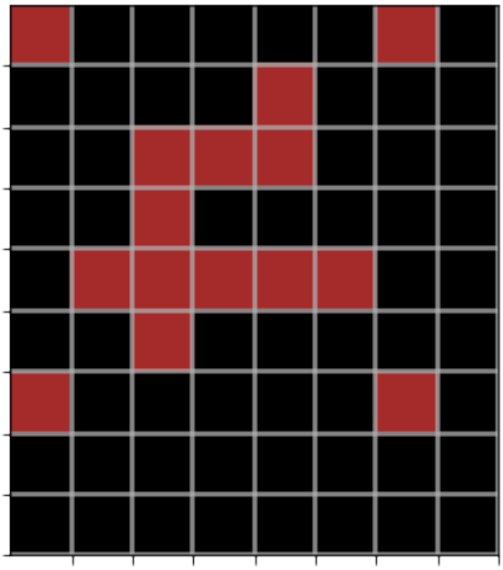

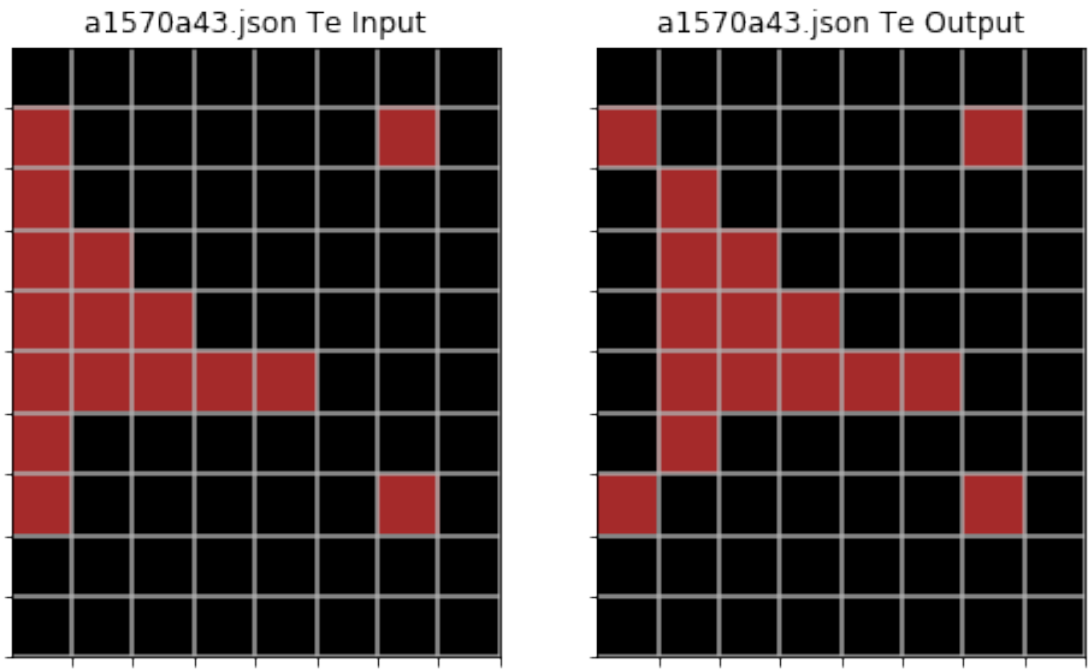
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a1570a43.json Te Output

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i = 14
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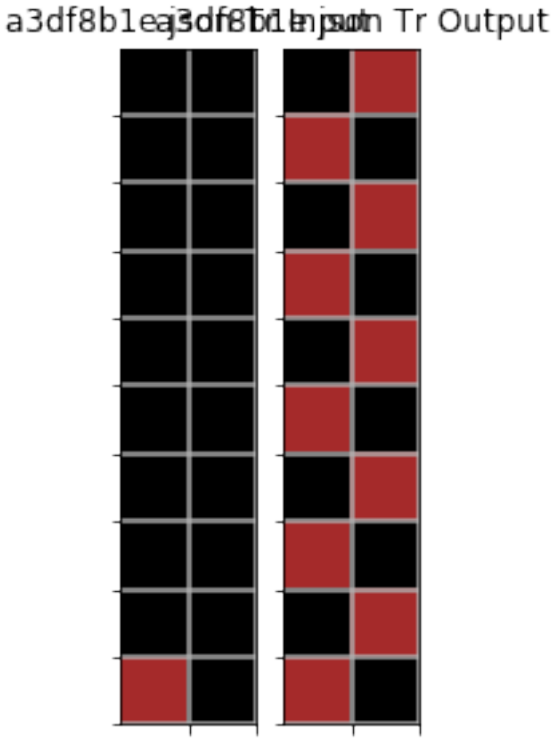
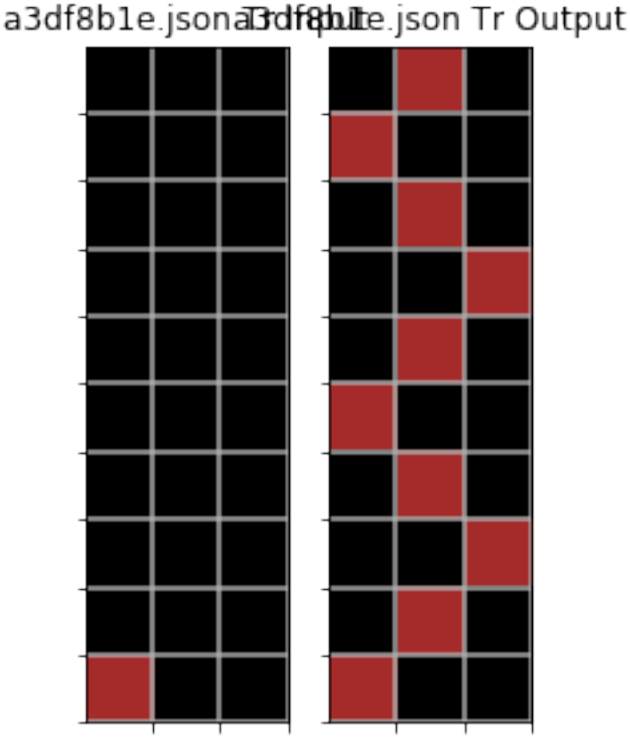

a3df8b1e.json Tr Output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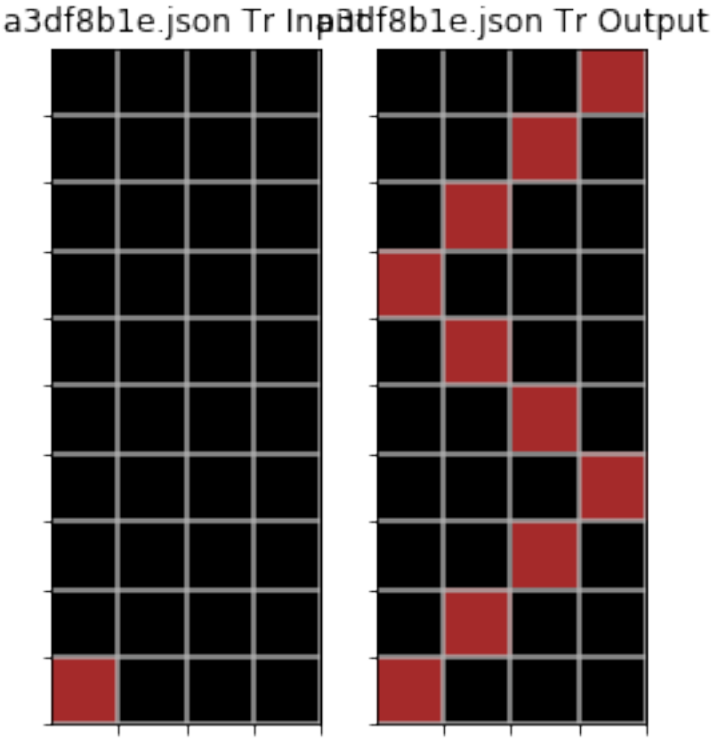
a3df8b1e.json Tr Output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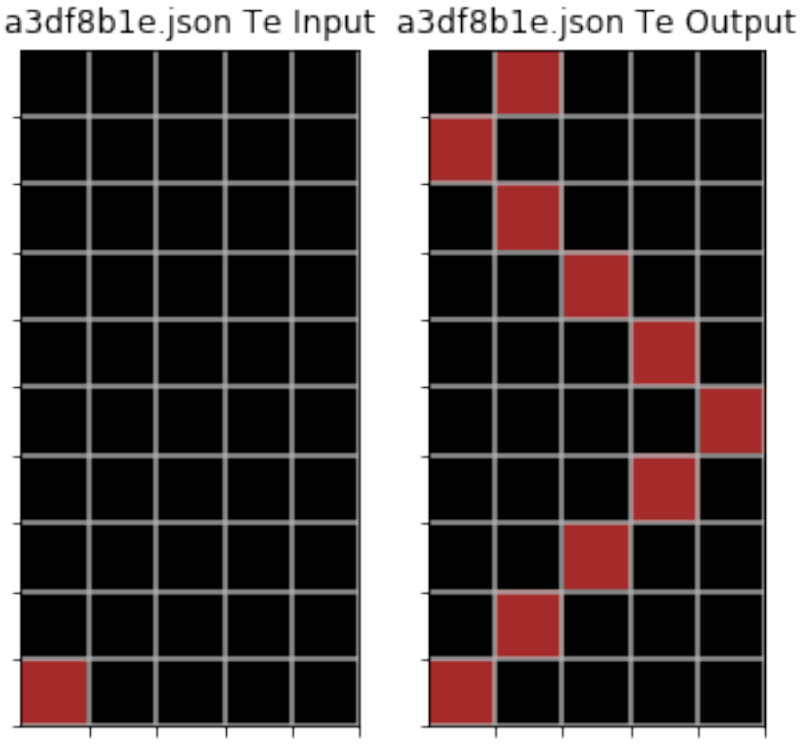
a3df8b1e.json Tr Output


a3df8b1e.json Te Input
a3df8b1e.json Te Output

```
i = 15
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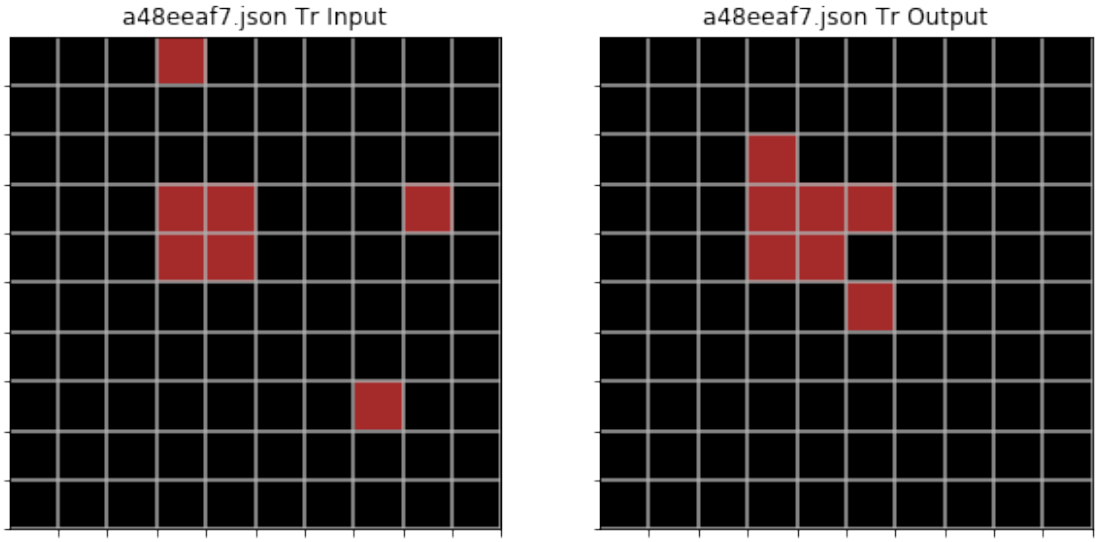
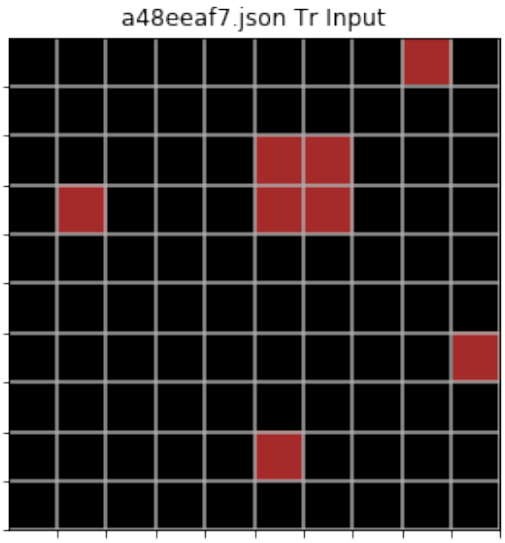
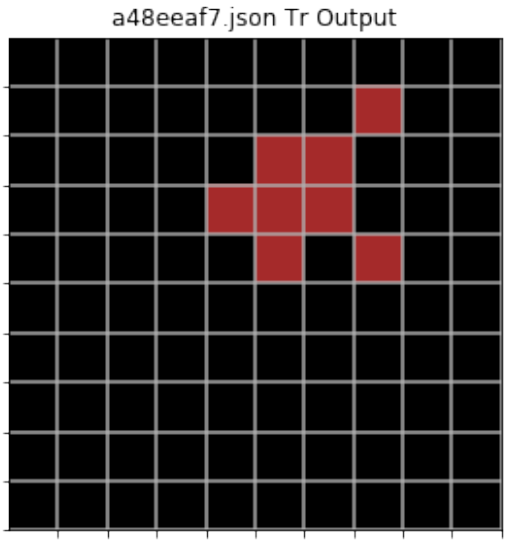

a48eeaf7.json Tr Input
a48eeaf7.json Tr Output


a48eeaf7.json Tr Input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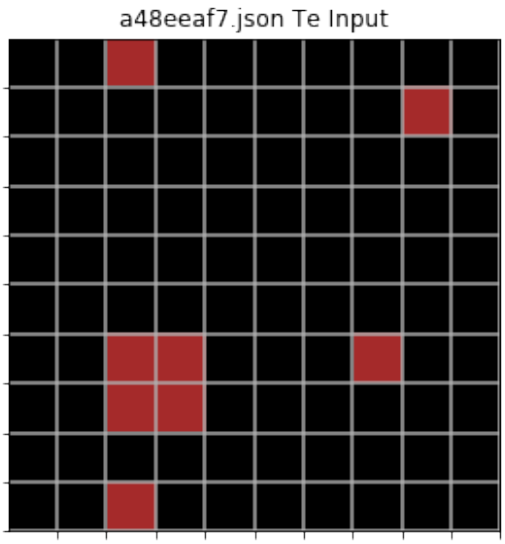
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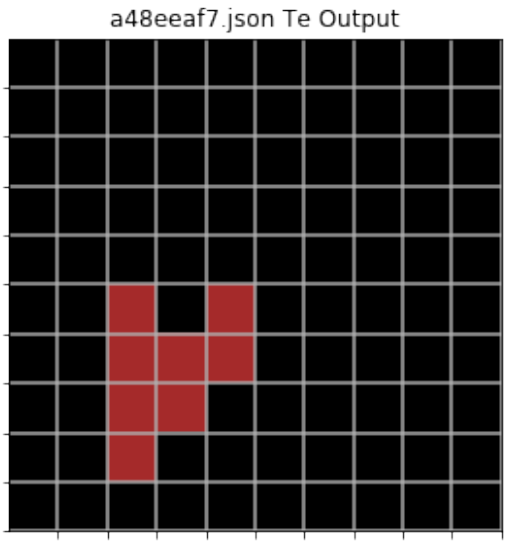
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i = 16
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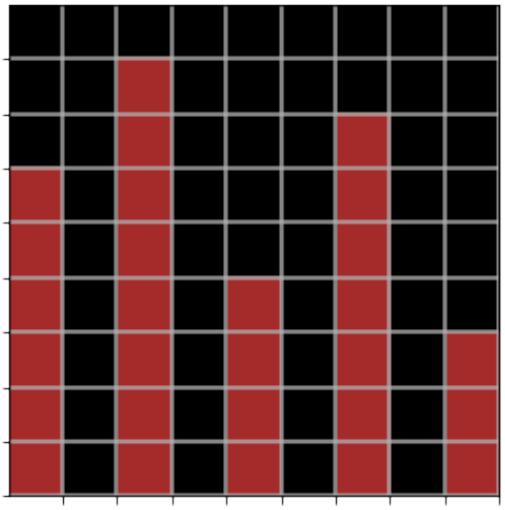
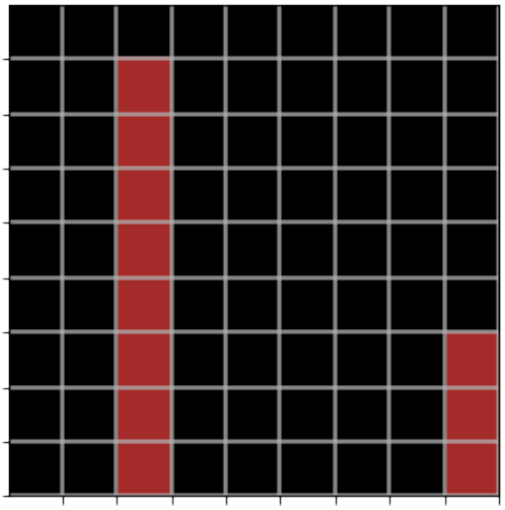
a61f2674.json Tr Input



a61f2674.json Tr Output



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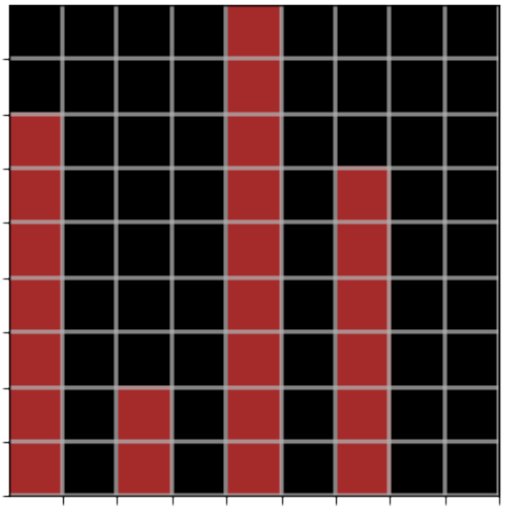

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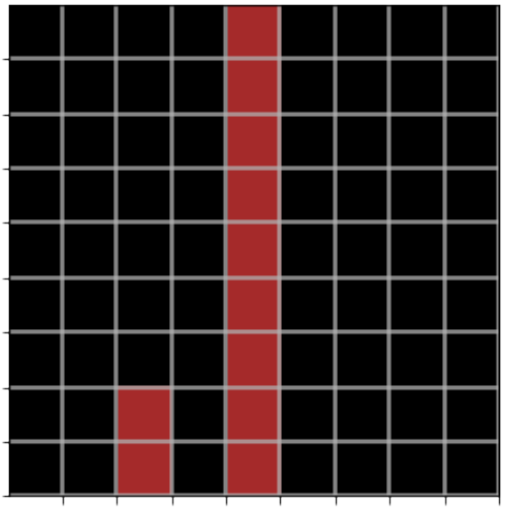

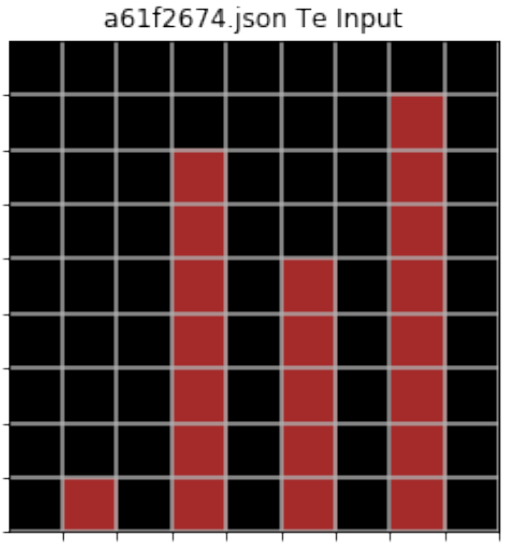
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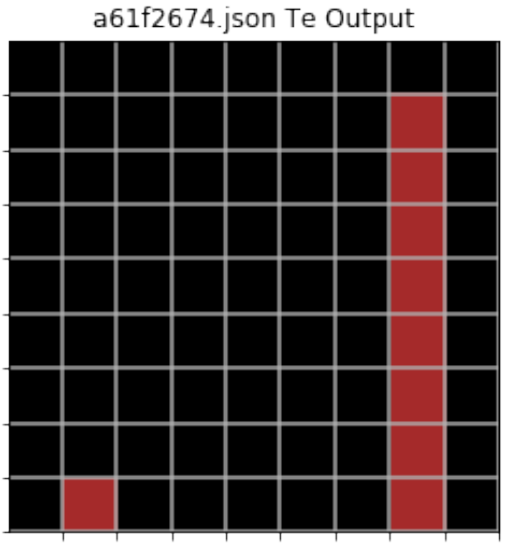
a61f2674.json Te Output

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i = 17
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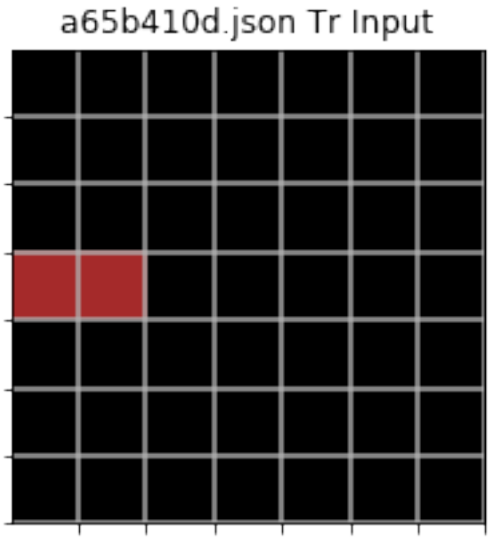
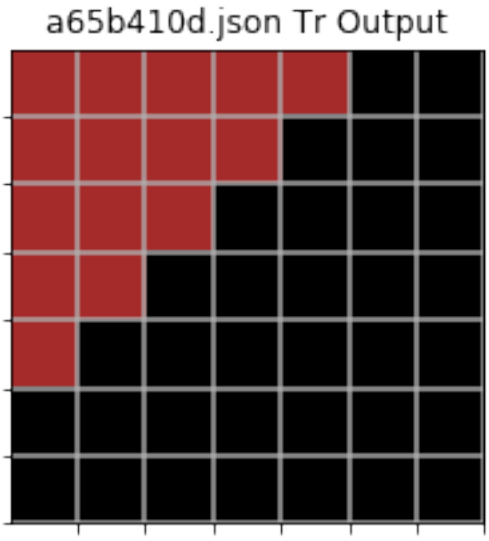
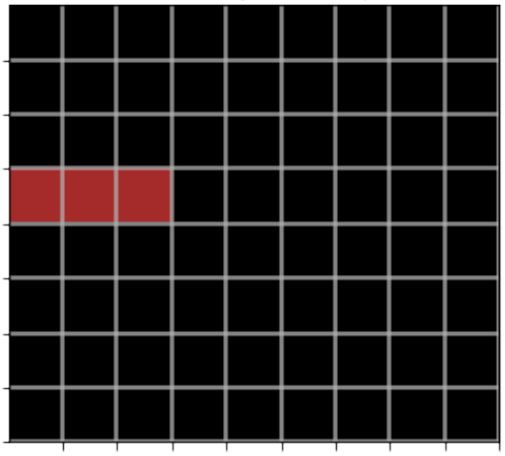
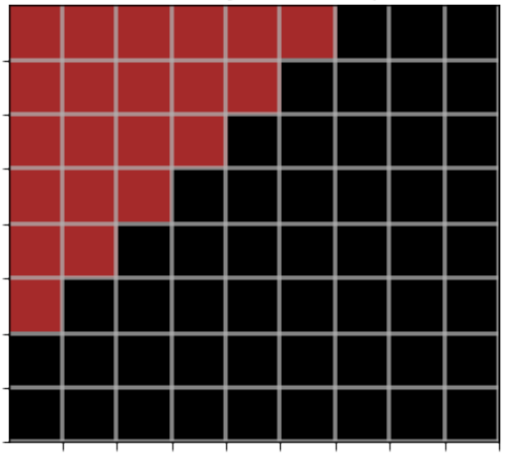

a65b410d.json Tr Input


a65b410d.json Tr Output

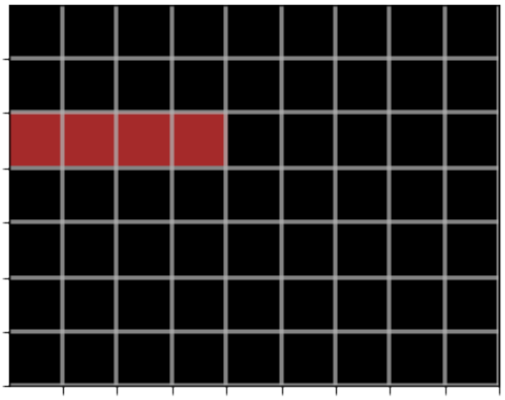
a65b410d.json Tr Input



a65b410d.json Tr Output



a65b410d.json Tr Input



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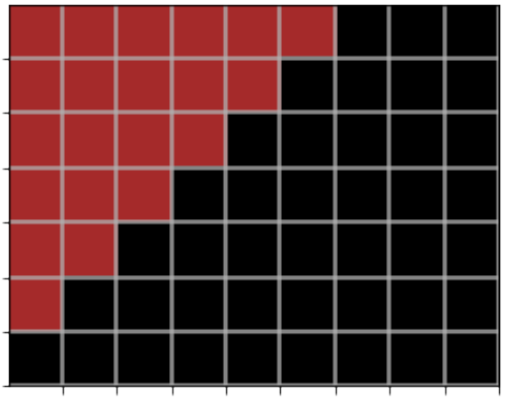

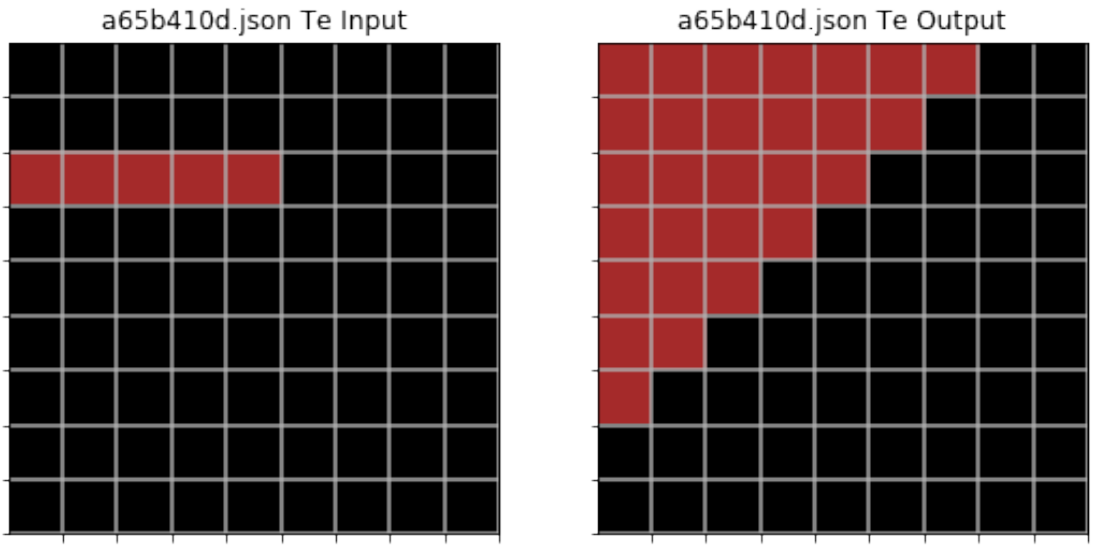
a65b410d.json Te Input
a65b410d.json Te Output

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i = 18
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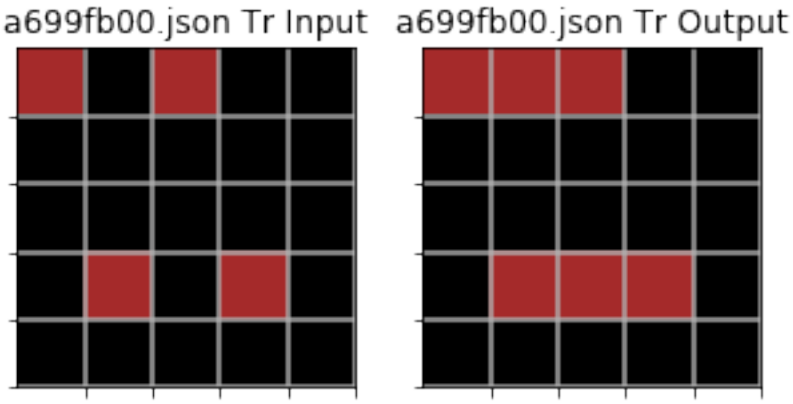
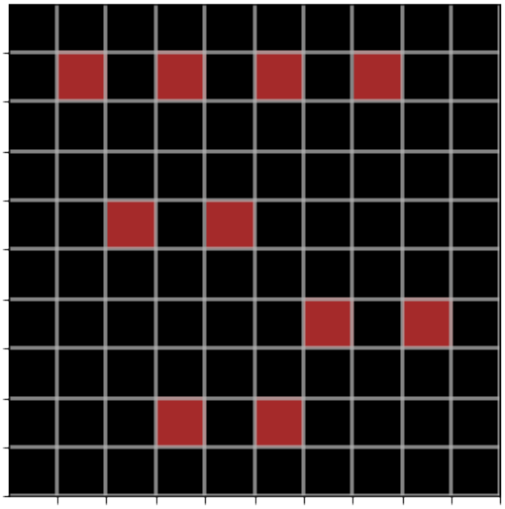
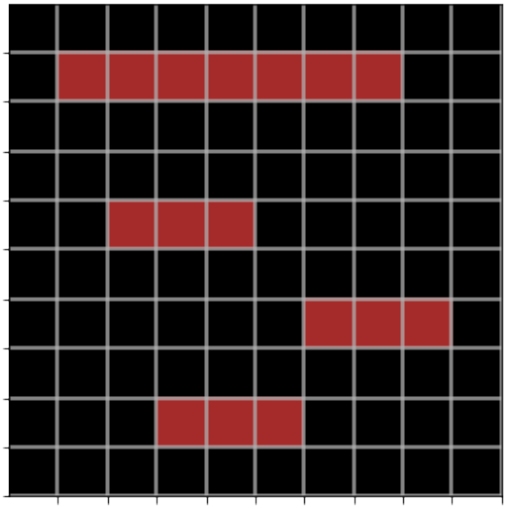

a699fb00.json Tr Input
a699fb00.json Tr Output

a699fb00.json Tr Input



a699fb00.json Tr Output



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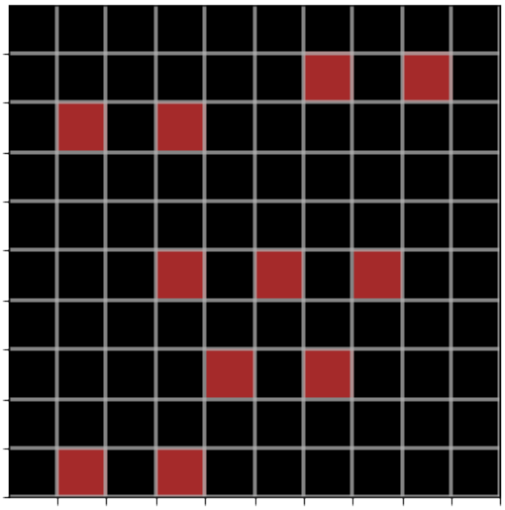

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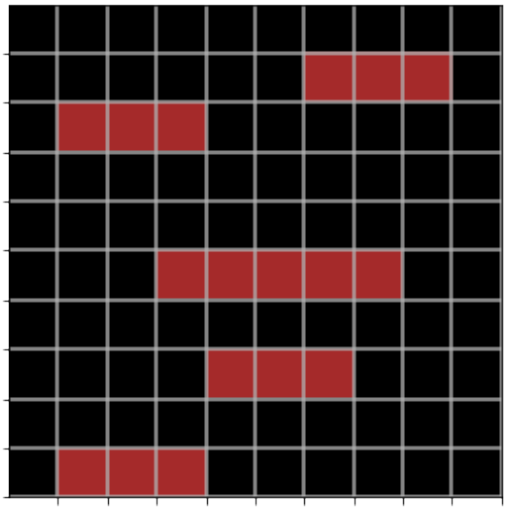

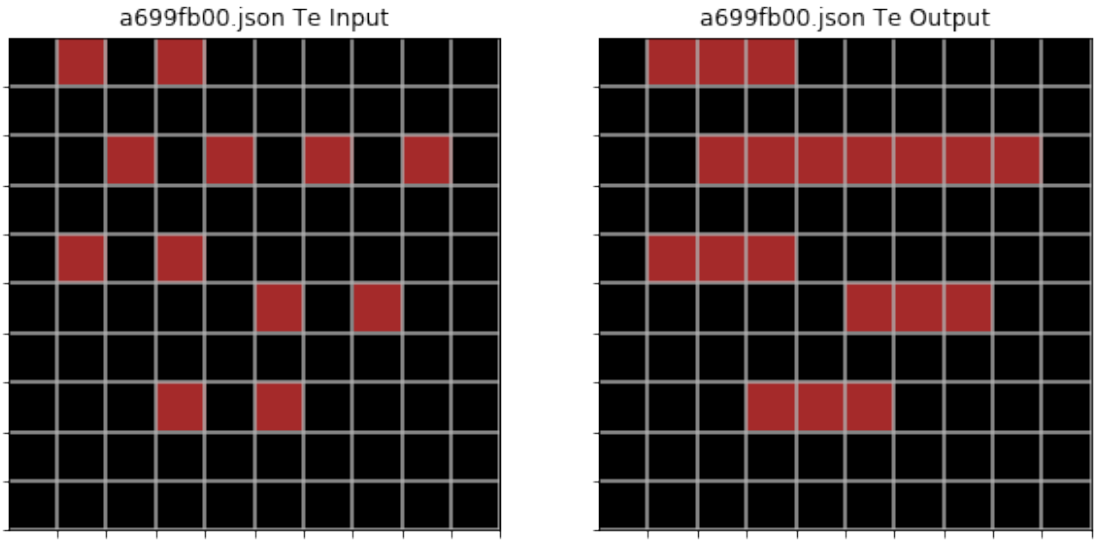
a699fb00.json Te Input
a699fb00.json Te Output

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i = 19
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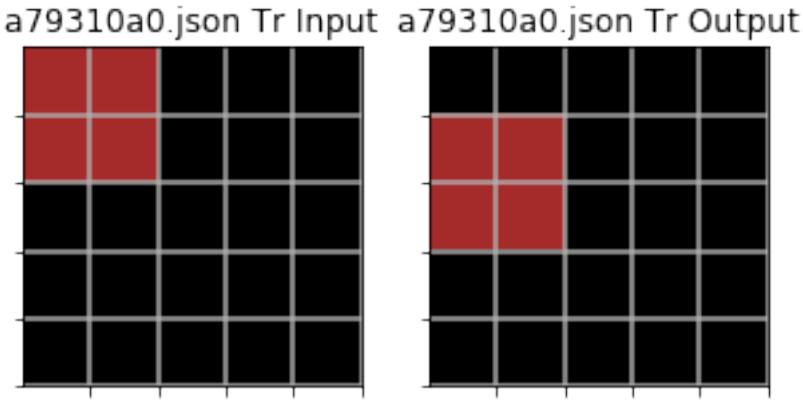
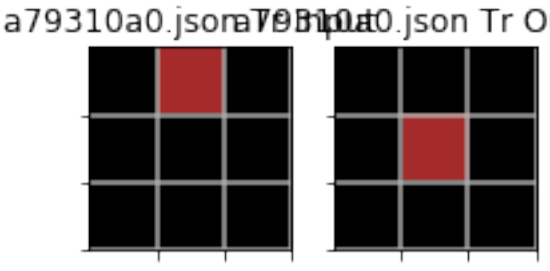
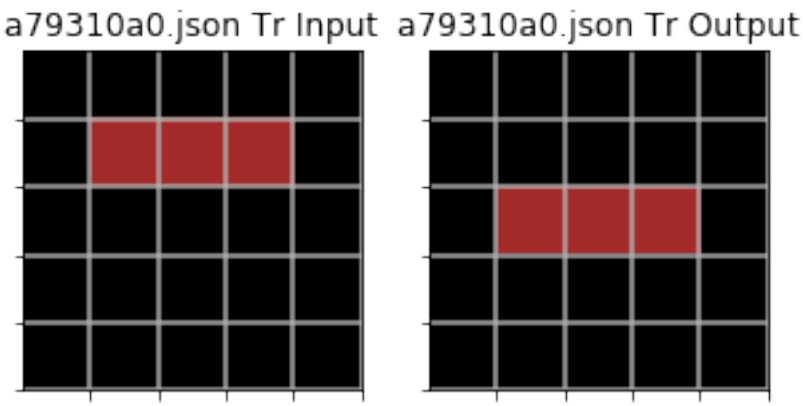

a79310a0.json Tr Input
a79310a0.json Tr Output


a79310a0.json Tr Output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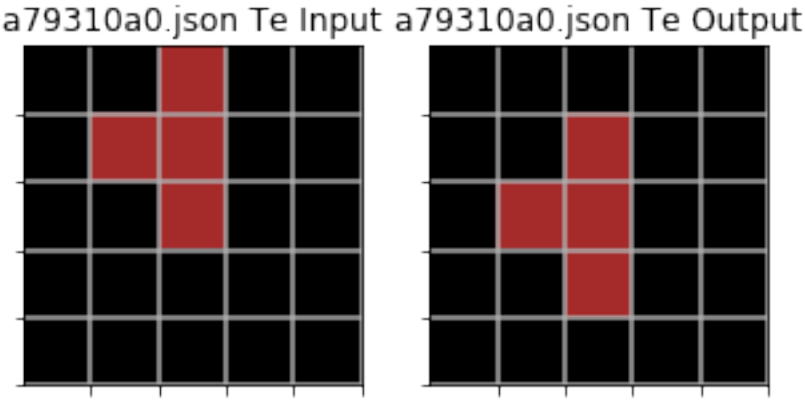
a79310a0.json Tr Output


a79310a0.json Te Input
a79310a0.json Te Output

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i = 20
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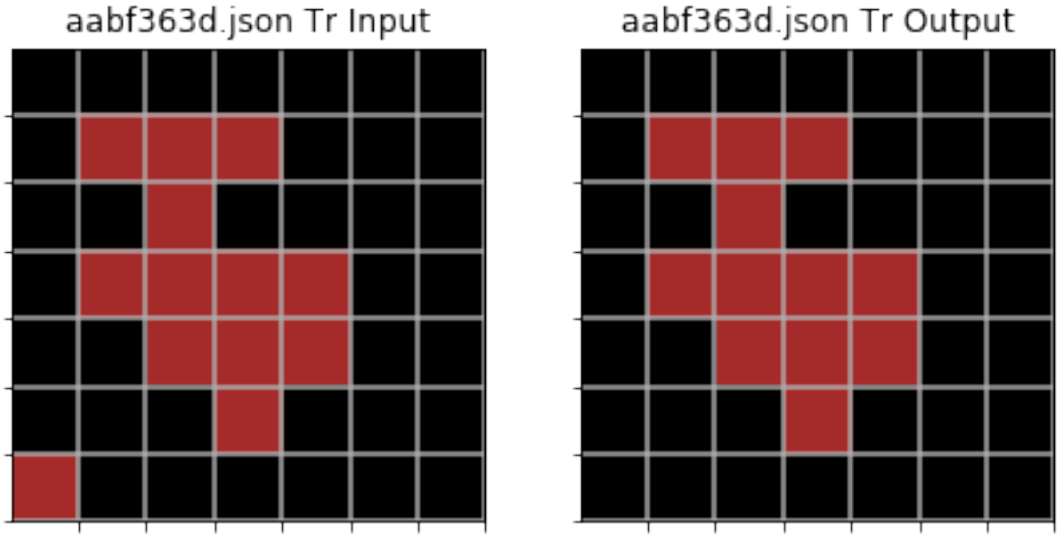
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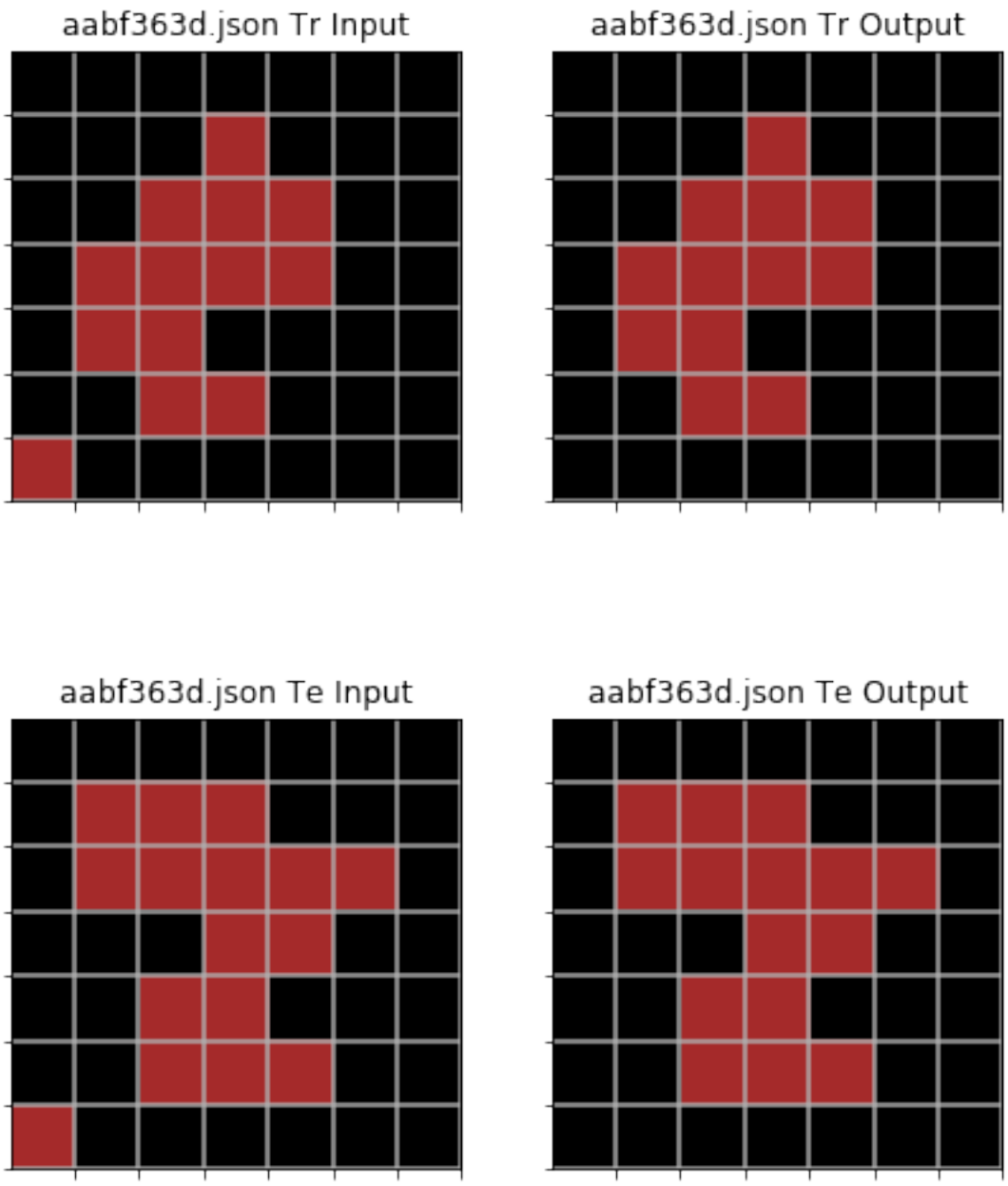
aabf363d.json Tr Output


aabf363d.json Tr Input
aabf363d.json Tr Output
aabf363d.json Te Input
aabf363d.json Te Output

```
i = 21
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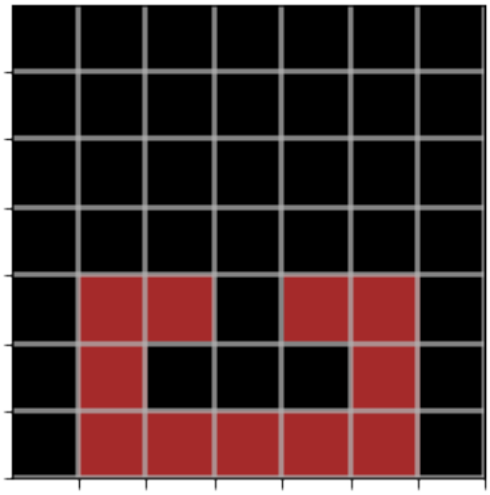
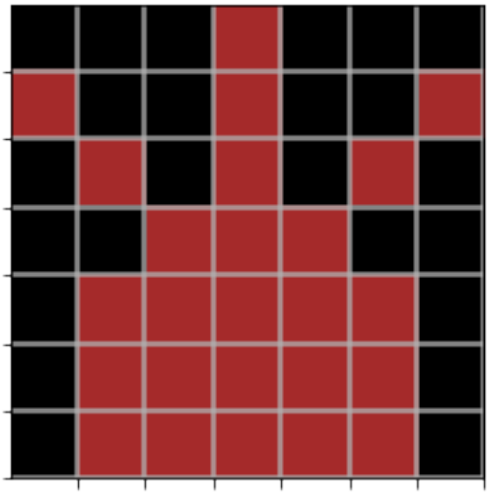
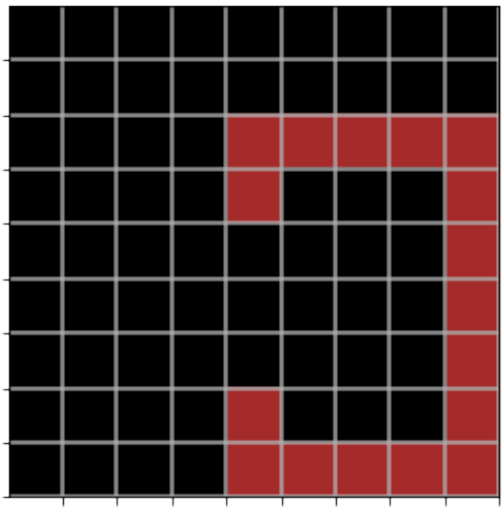
aba27056.json Tr Input



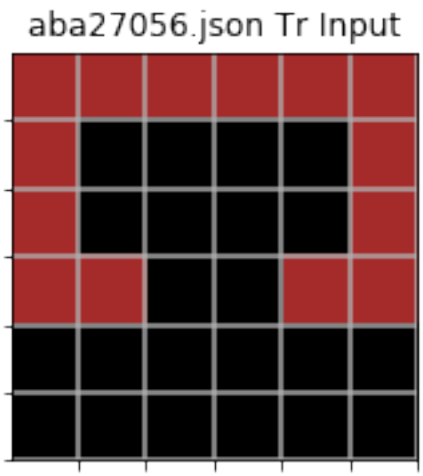
aba27056.json Tr Output



aba27056.json Tr Input



aba27056.json Tr Output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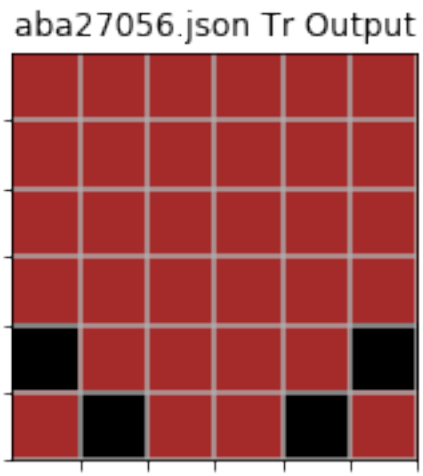
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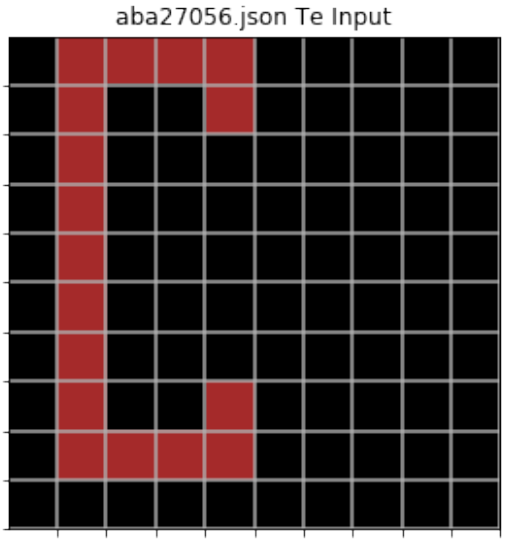
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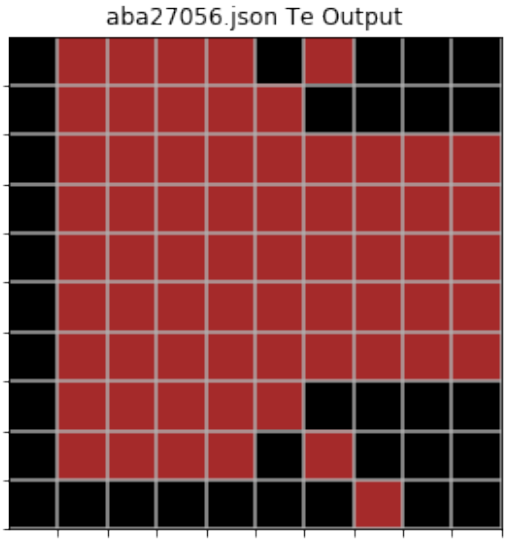
aba27056.json Te Output

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i = 22
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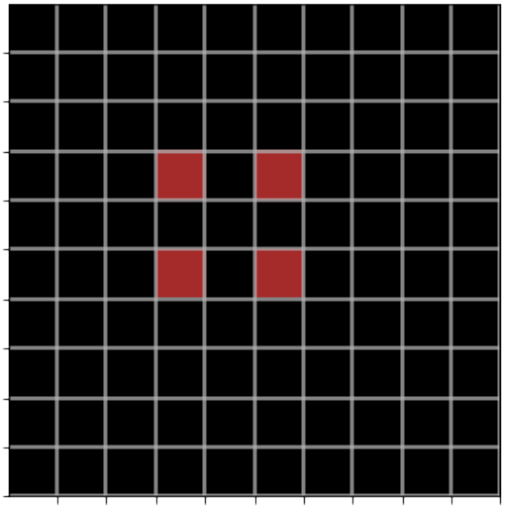
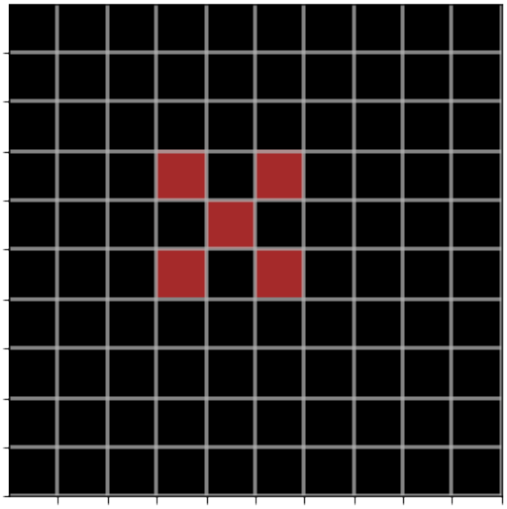
af902bf9.json Tr Input



af902bf9.json Tr Output



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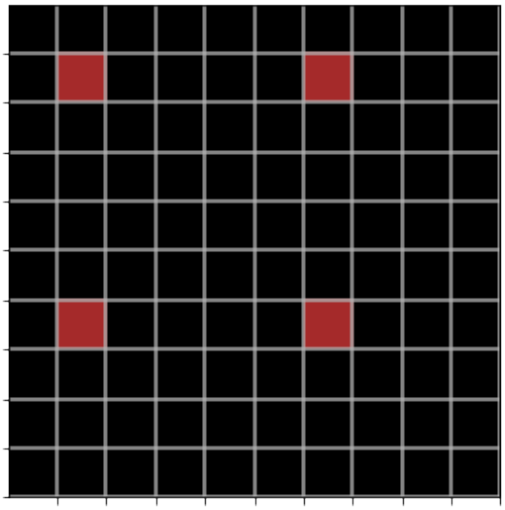
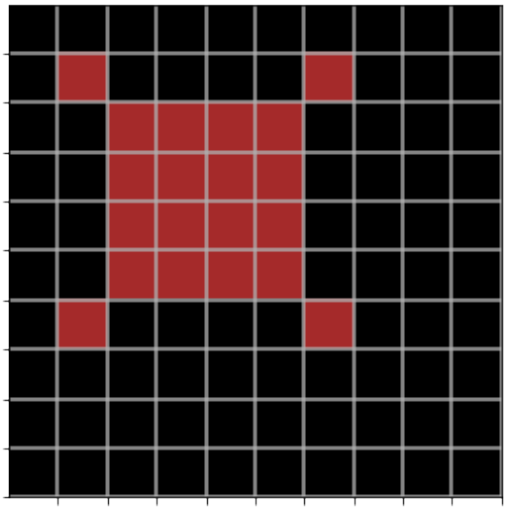
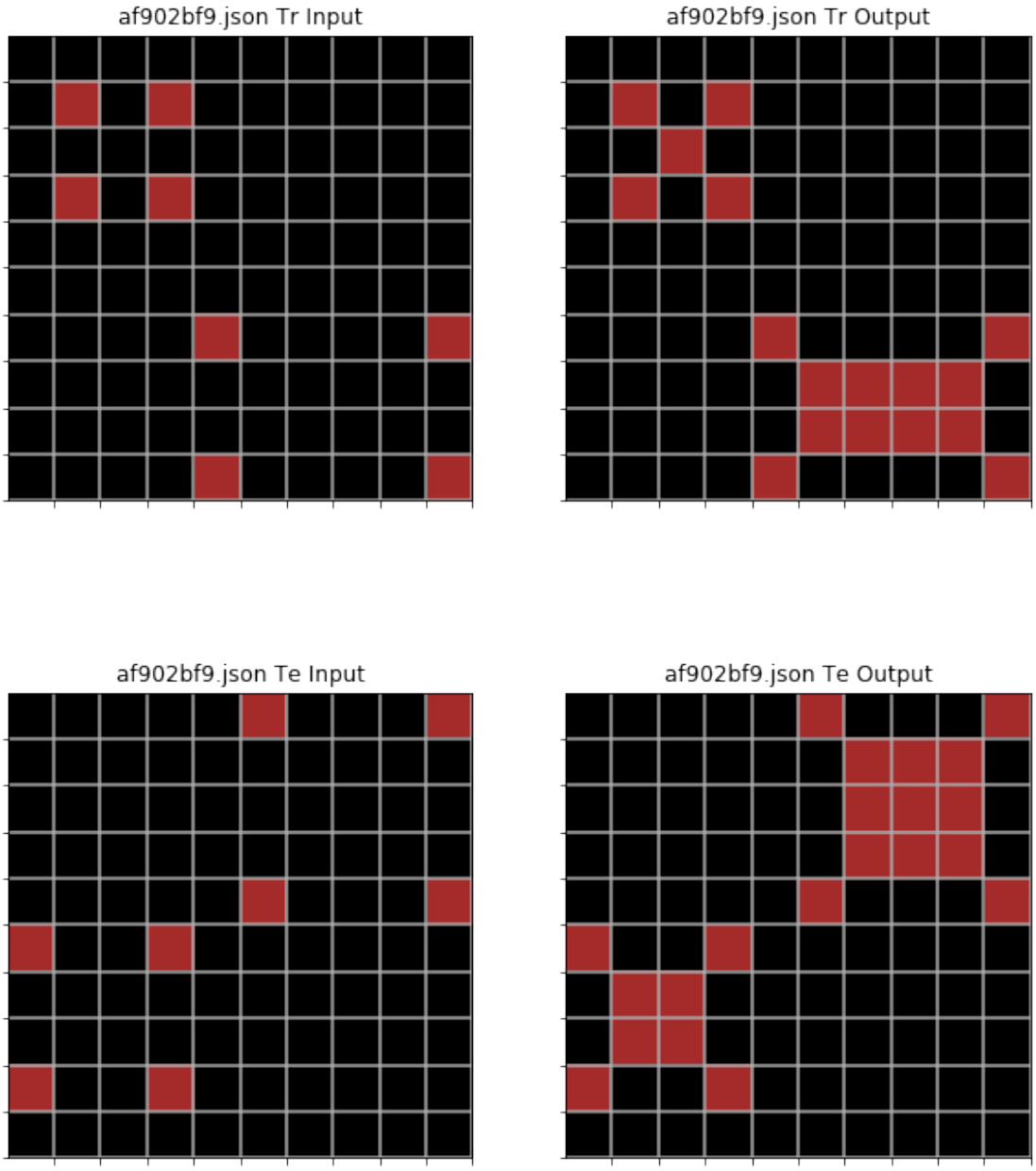


af902bf9.json Tr Output

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af902bf9.json Tr Output
af902bf9.json Te Input
af902bf9.json Te Output

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i = 23
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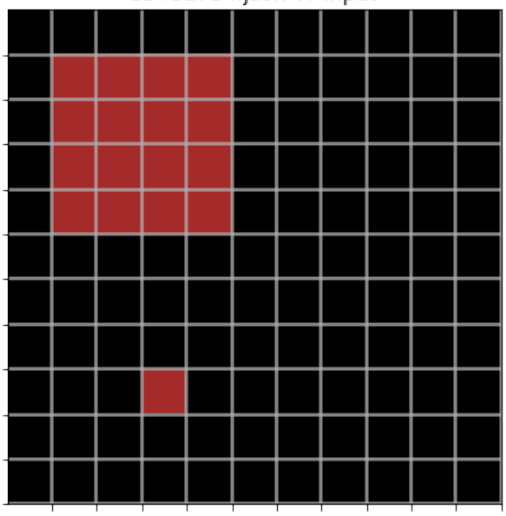
b548a754.json Tr Input



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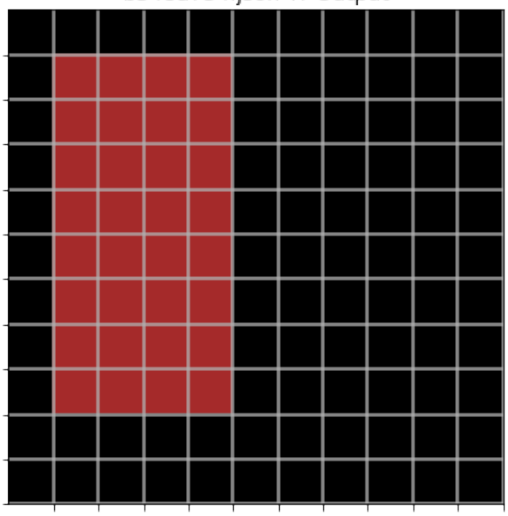

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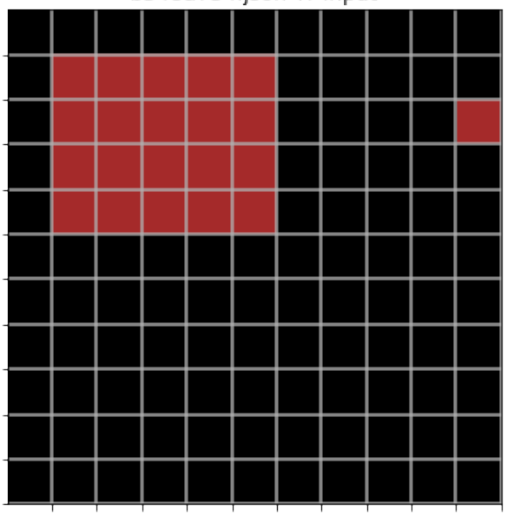

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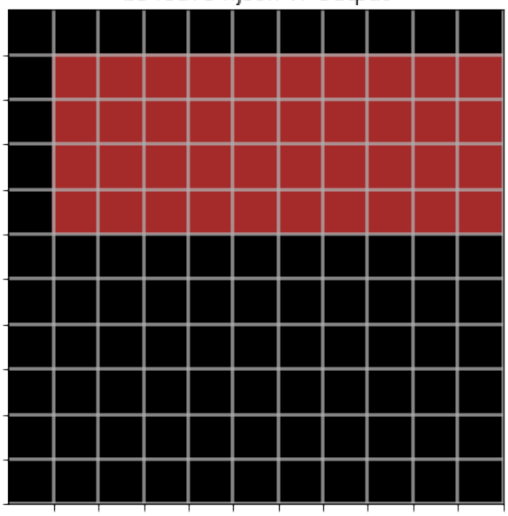

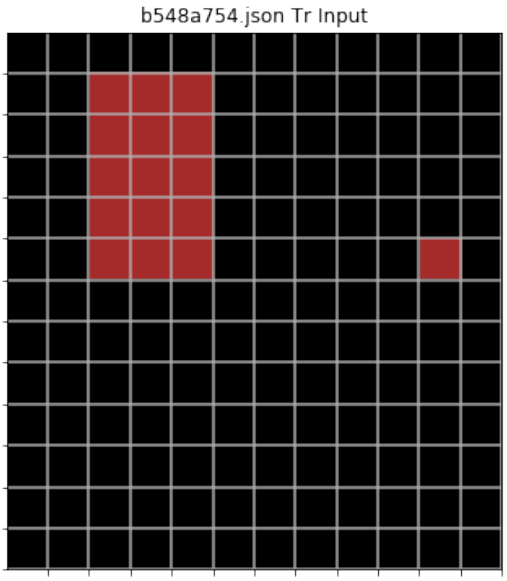
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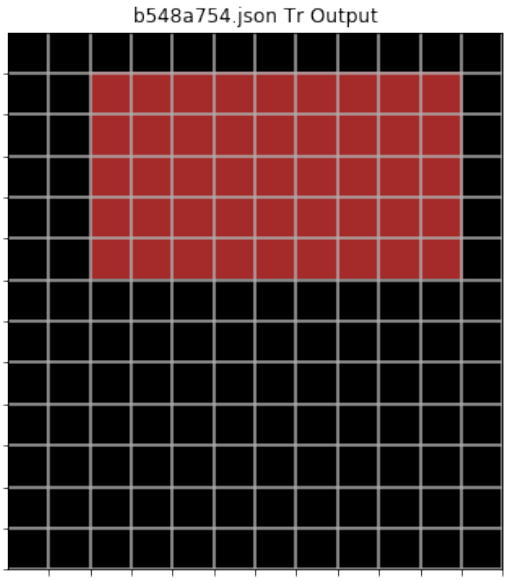
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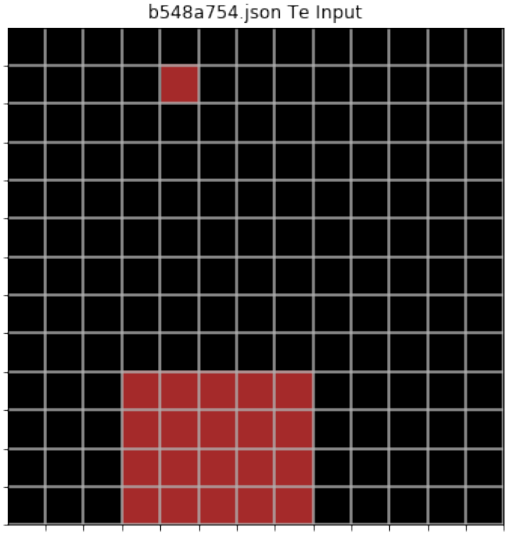
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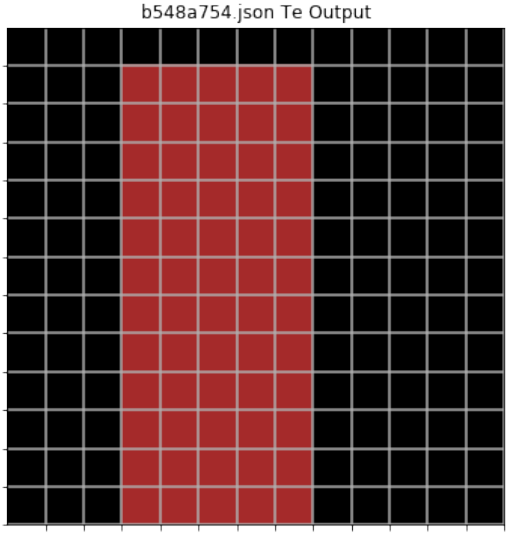
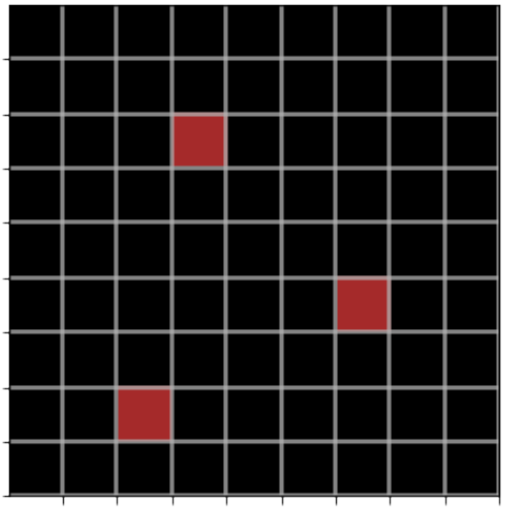
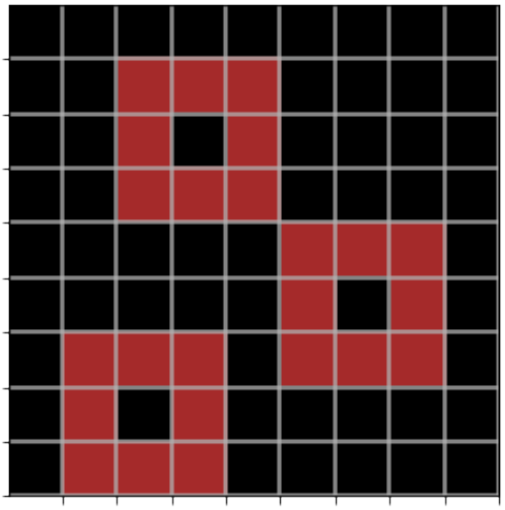

b548a754.json Te Output

i = 24

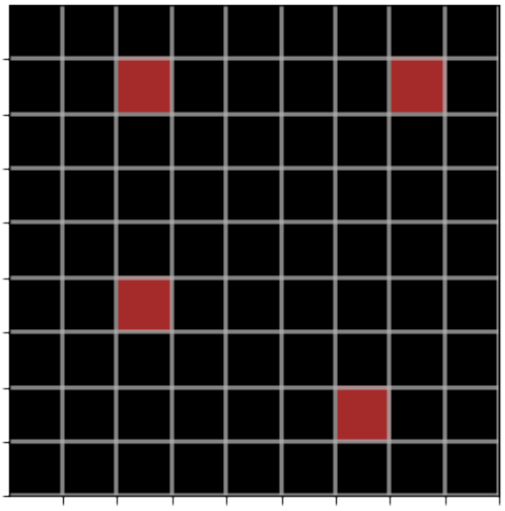
b60334d2.json Tr Input



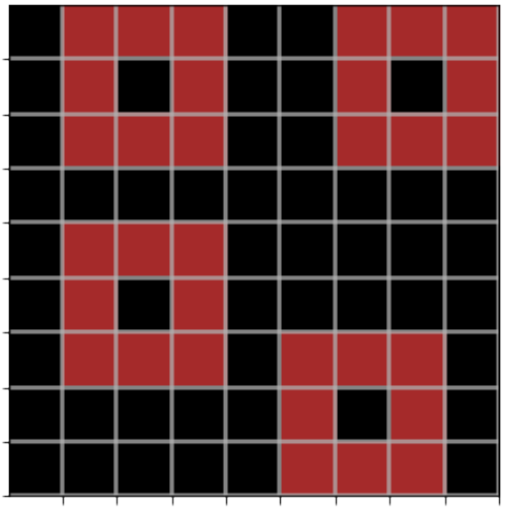
b60334d2.json Tr Output

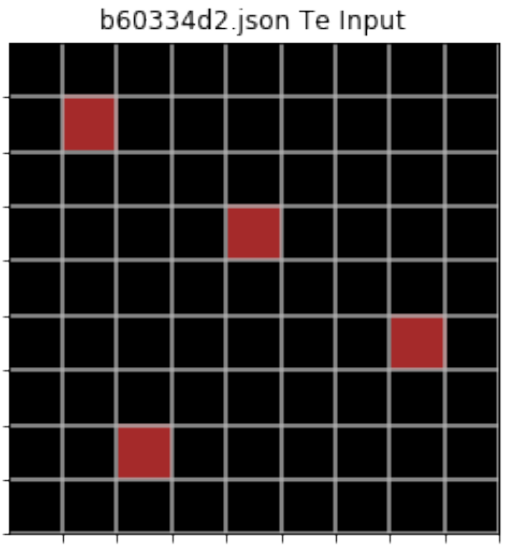


b60334d2.json Tr Input



b60334d2.json Tr Output

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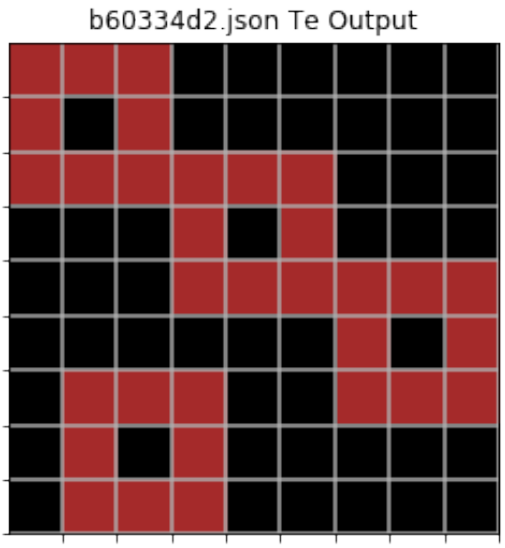
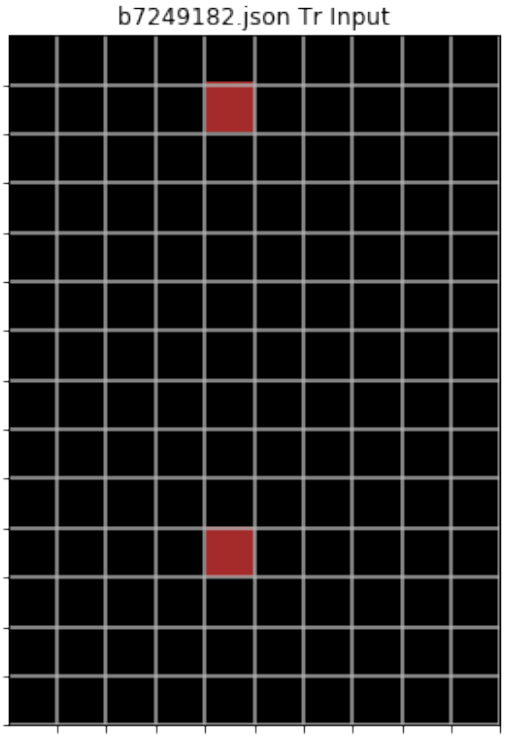

b60334d2.json Te Output

i = 25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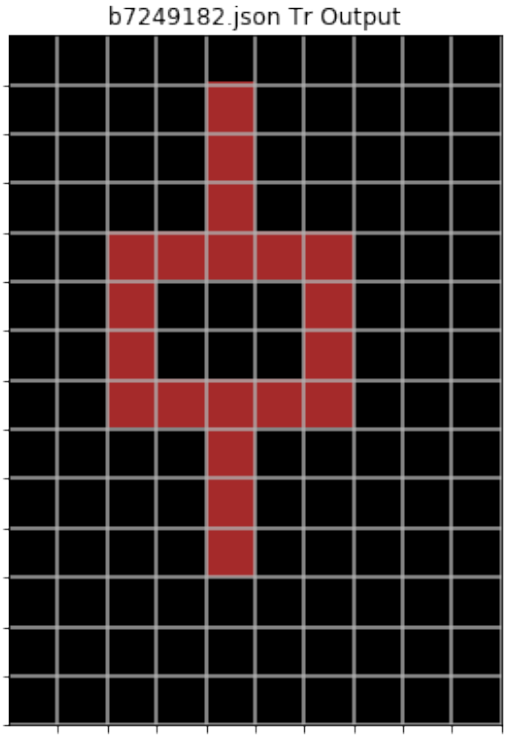
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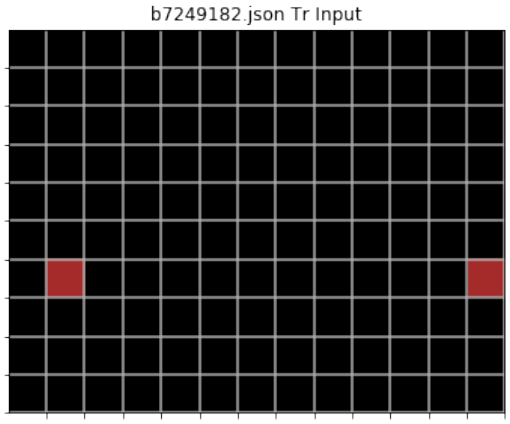
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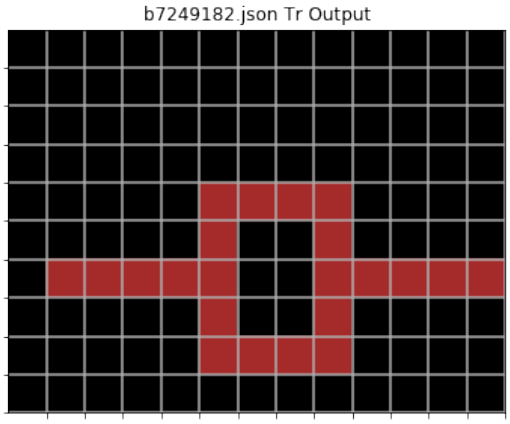
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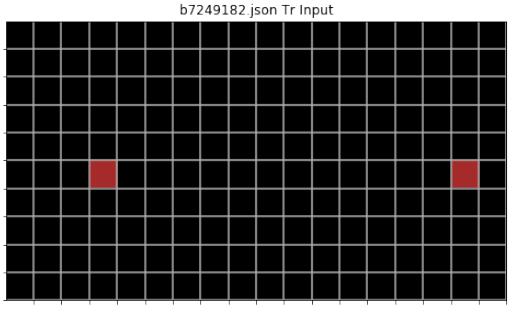
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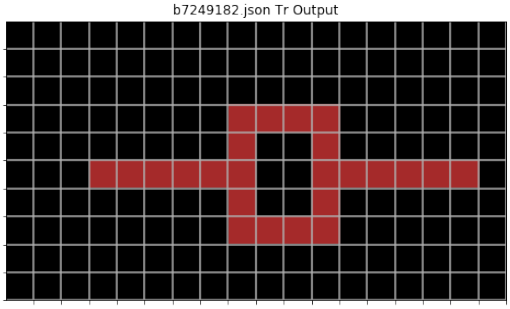
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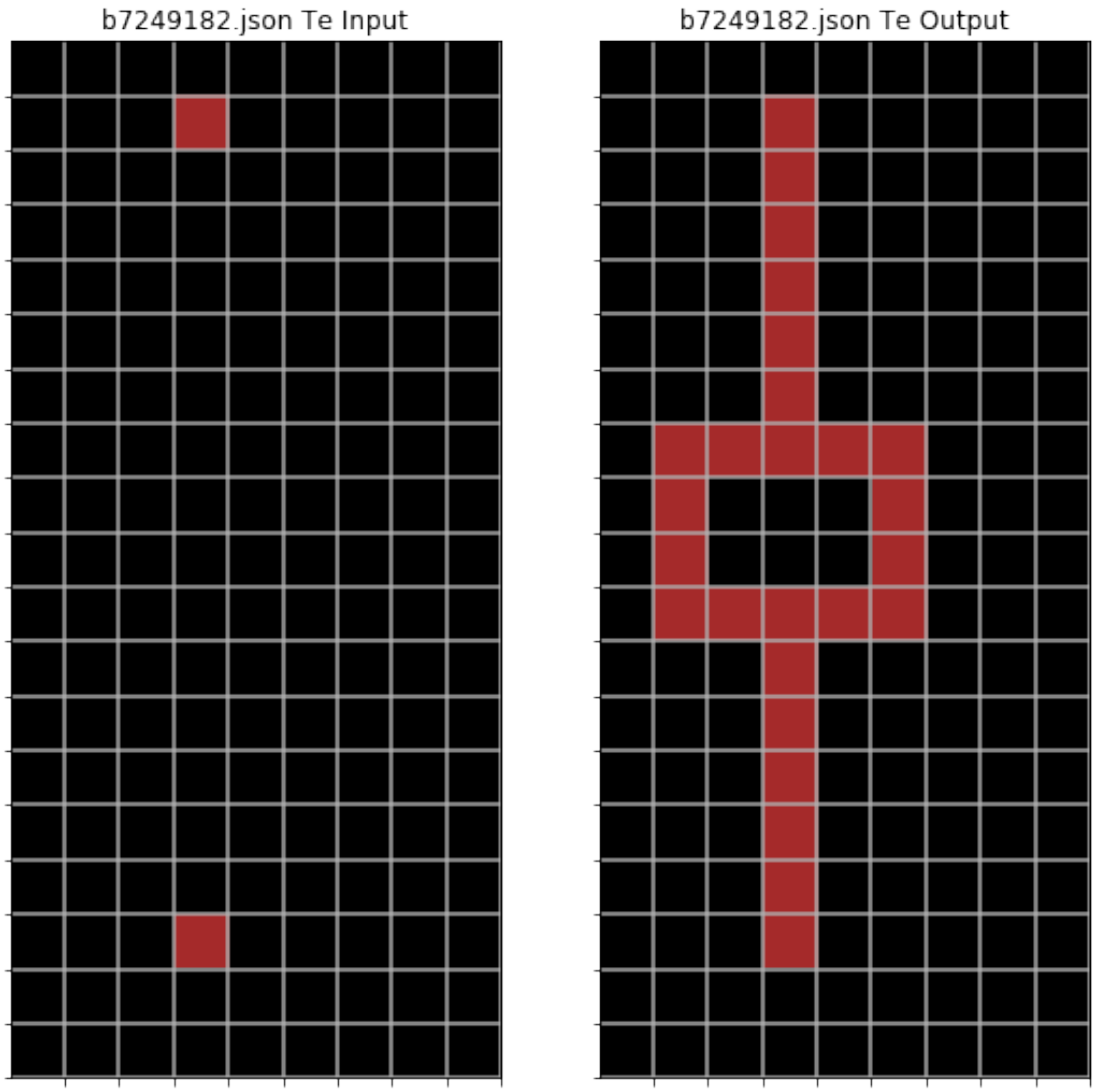
b7249182.json Te Input
b7249182.json Te Output

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i = 26
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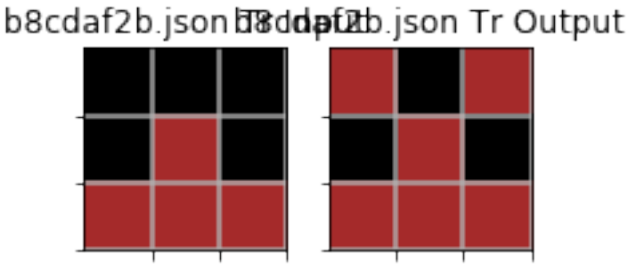
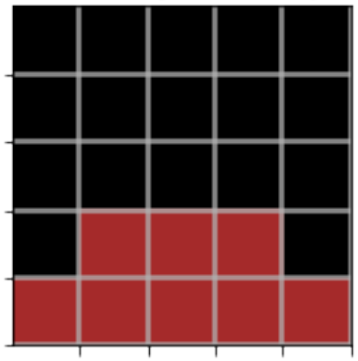

b8cdaf2b.json Tr Output

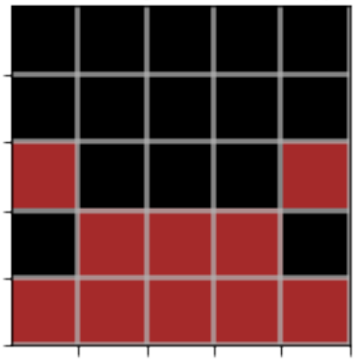
b8cdaf2b.json Tr Input

b8cdaf2b.json Tr Output

b8cdaf2b.json Tr Input



b8cdaf2b.json Tr Output



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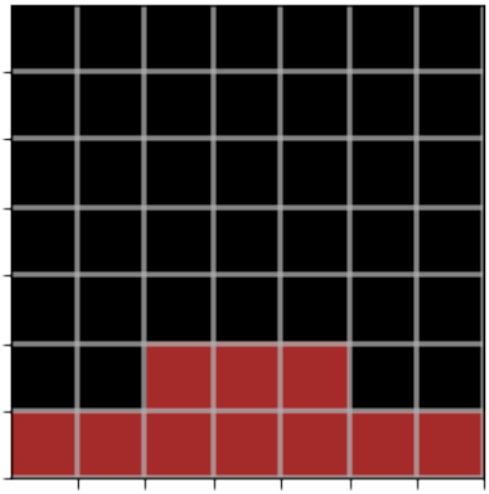

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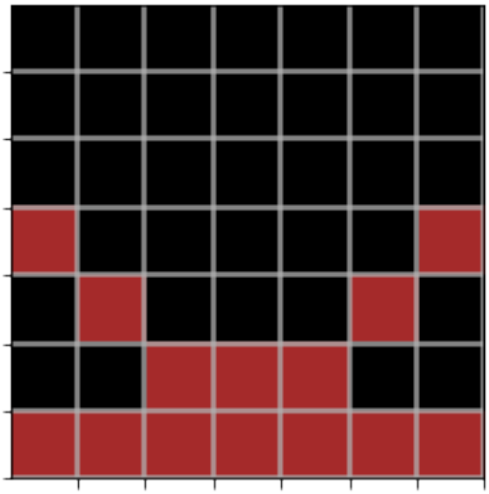

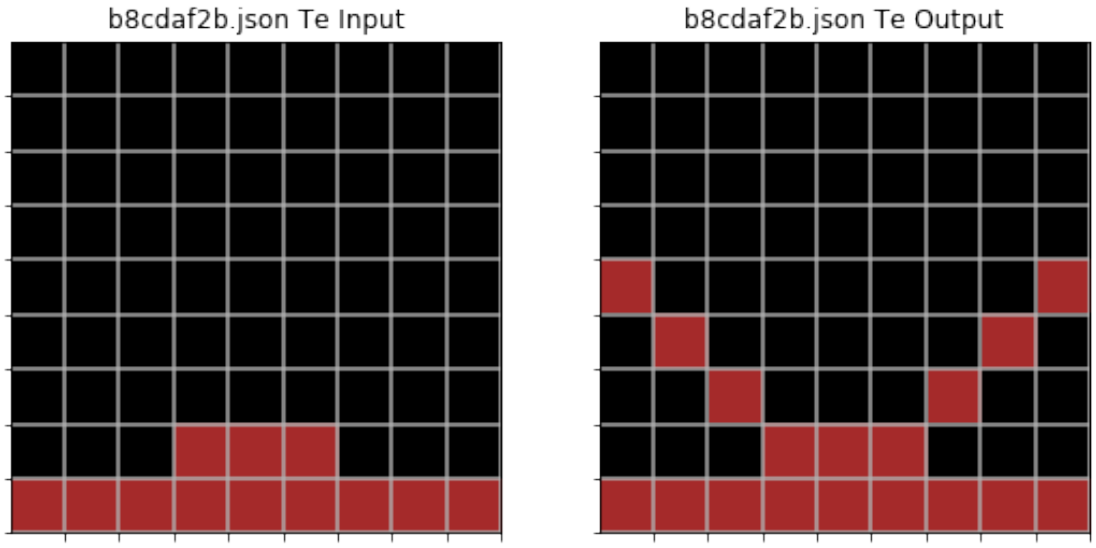
b8cdaf2b.json Te Input
b8cdaf2b.json Te Output

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i = 27
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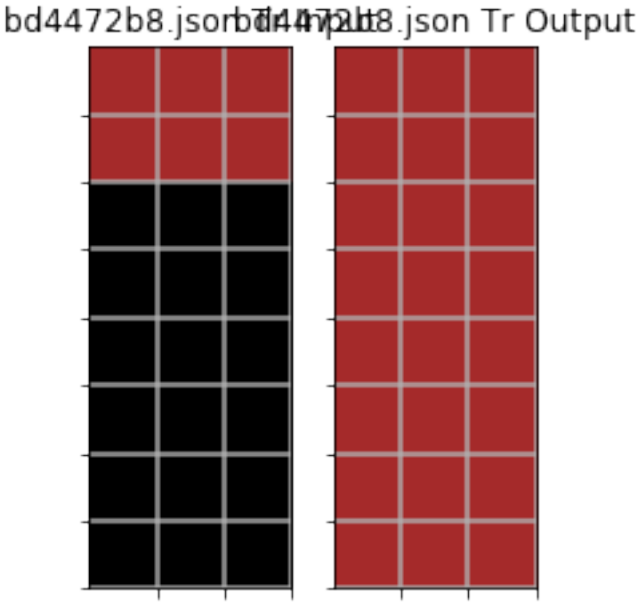
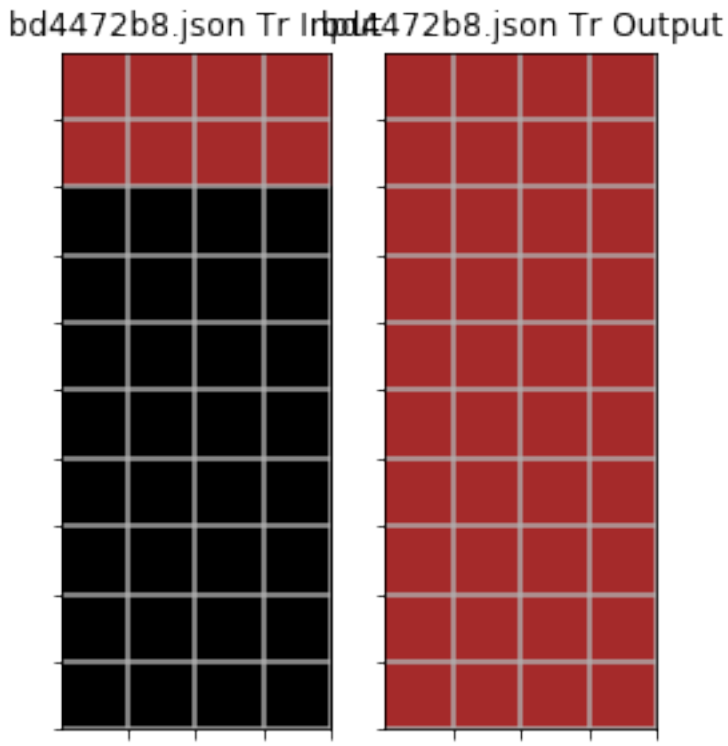
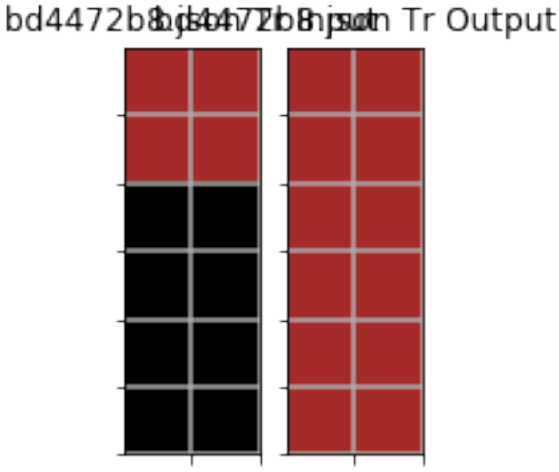

bd4472b8.json Tr Output


bd4472b8.json Tr Input
bd4472b8.json Tr Output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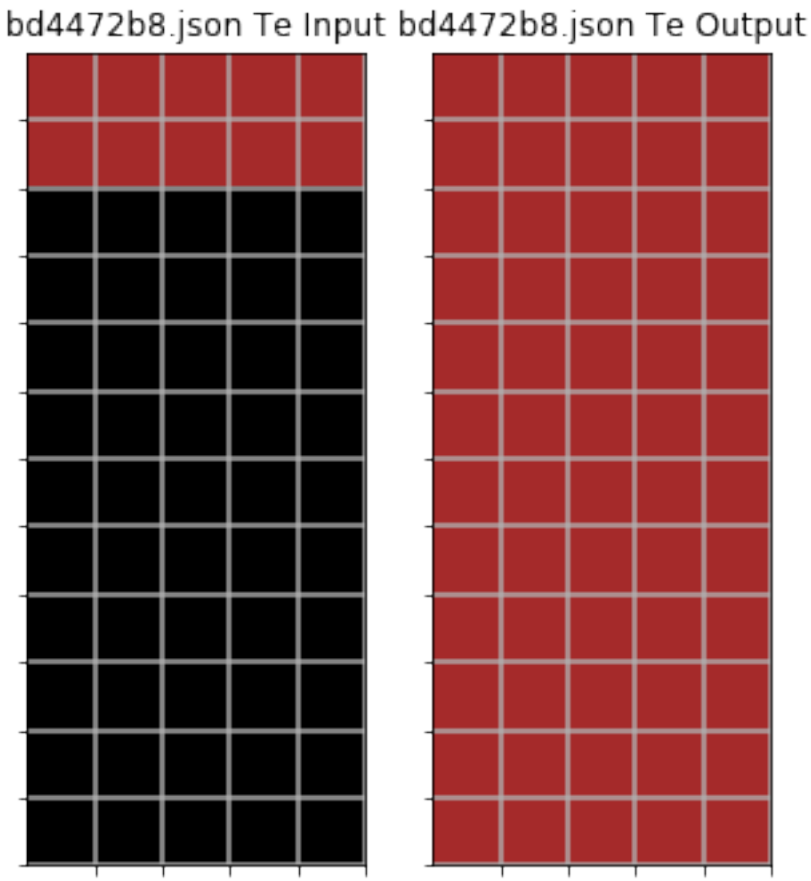
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bd4472b8.json Te Output

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i = 28
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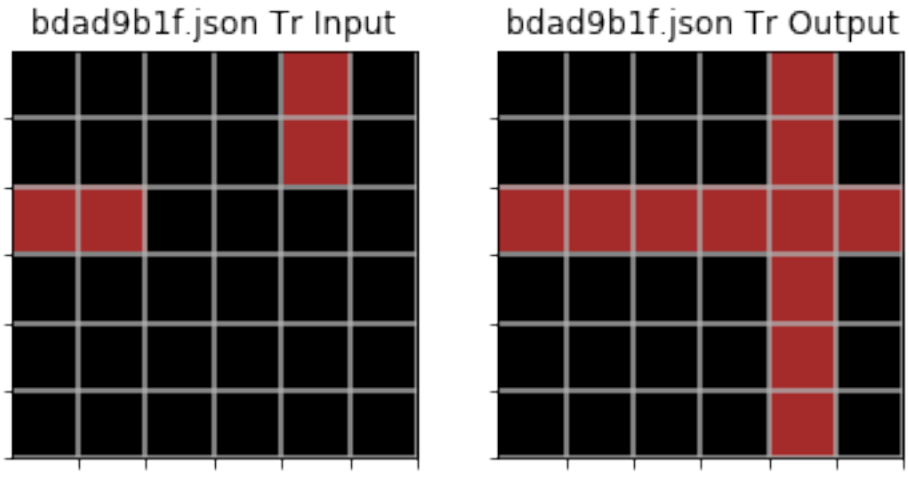
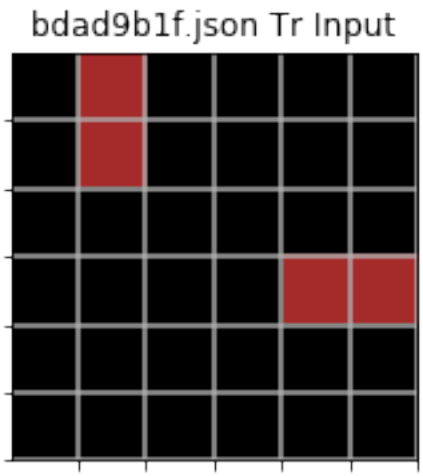

bdad9b1f.json Tr Input
bdad9b1f.json Tr Output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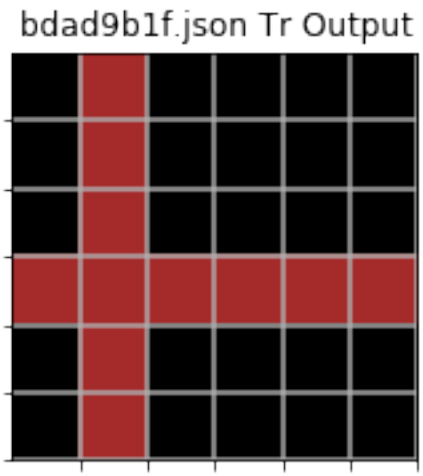
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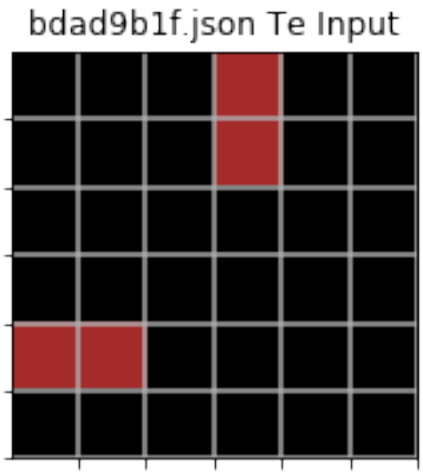
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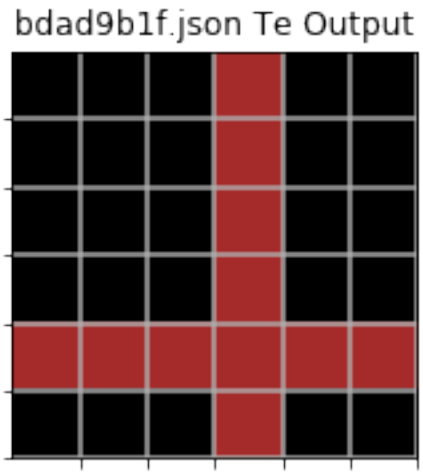
bdad9b1f.json Te Output

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i = 29
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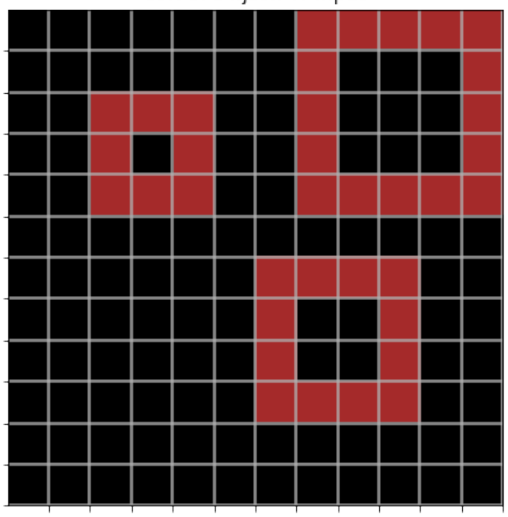
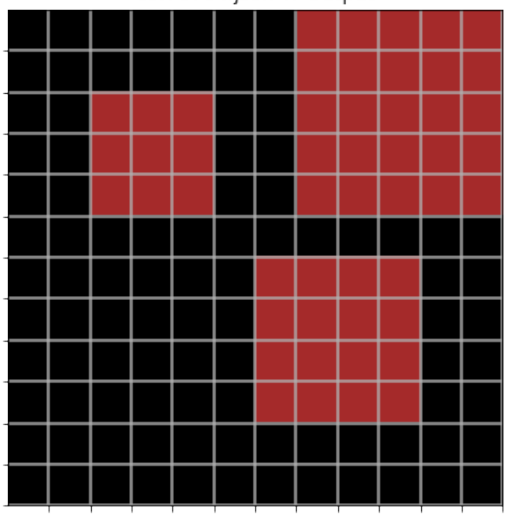
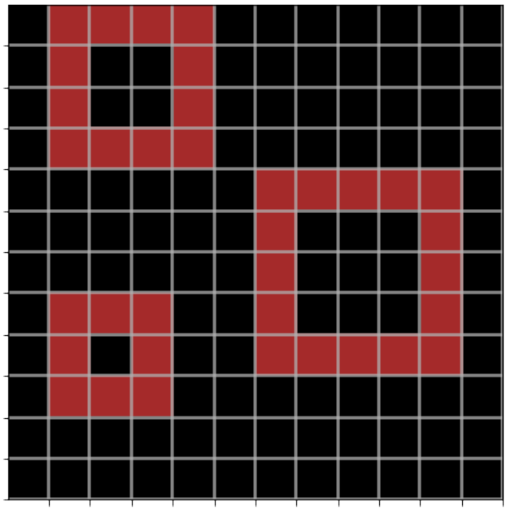
c0f76784.json Tr Input



c0f76784.json Tr Output



c0f76784.json Tr Input



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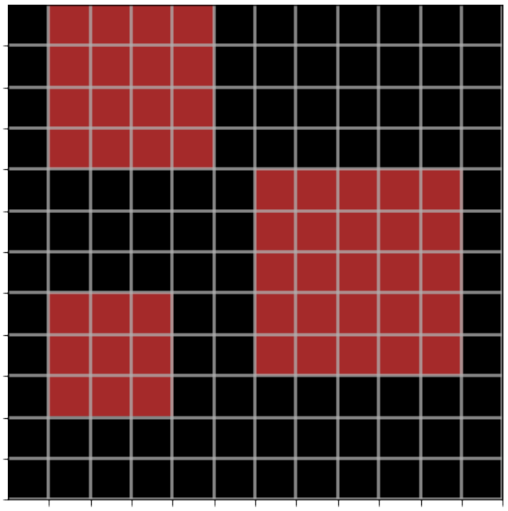

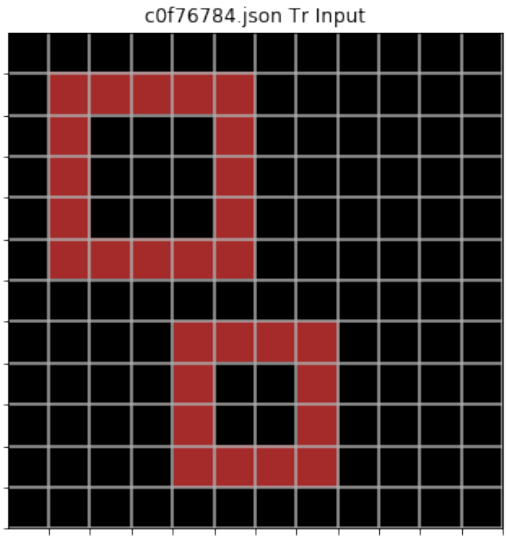
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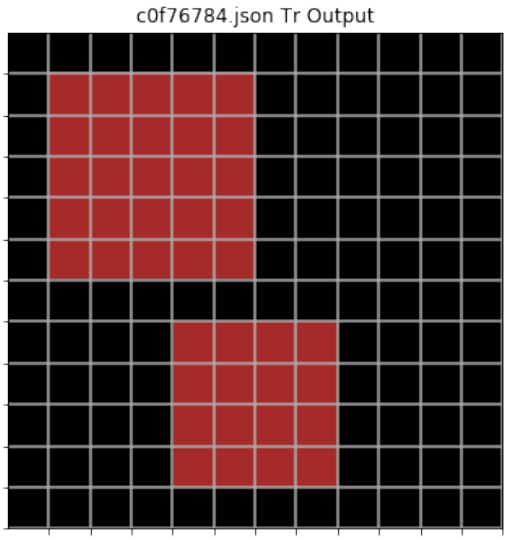
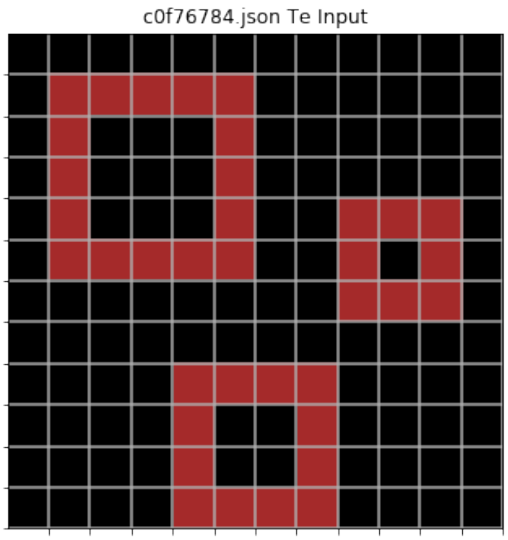
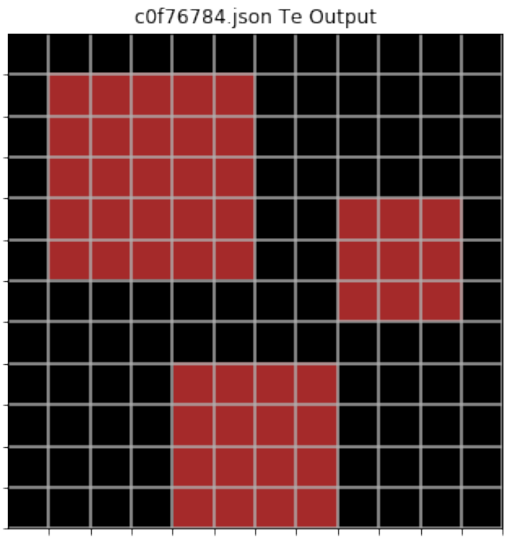

c0f76784.json Tr Output


c0f76784.json Te Input


c0f76784.json Te Output

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i = 30
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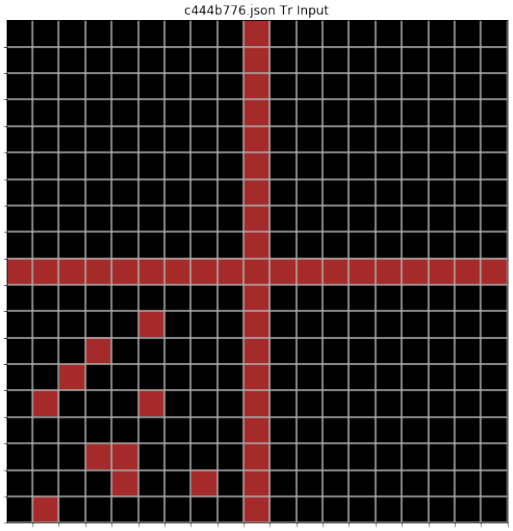
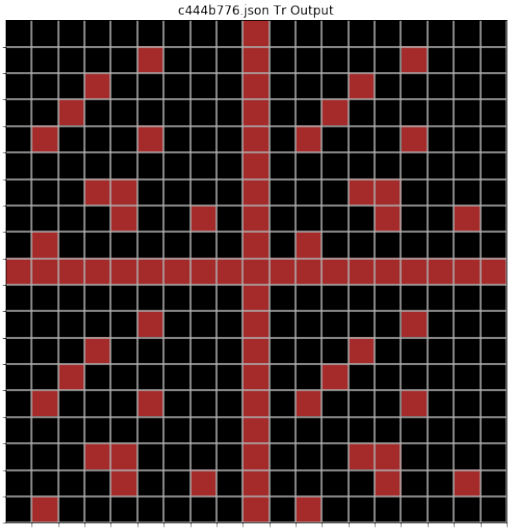
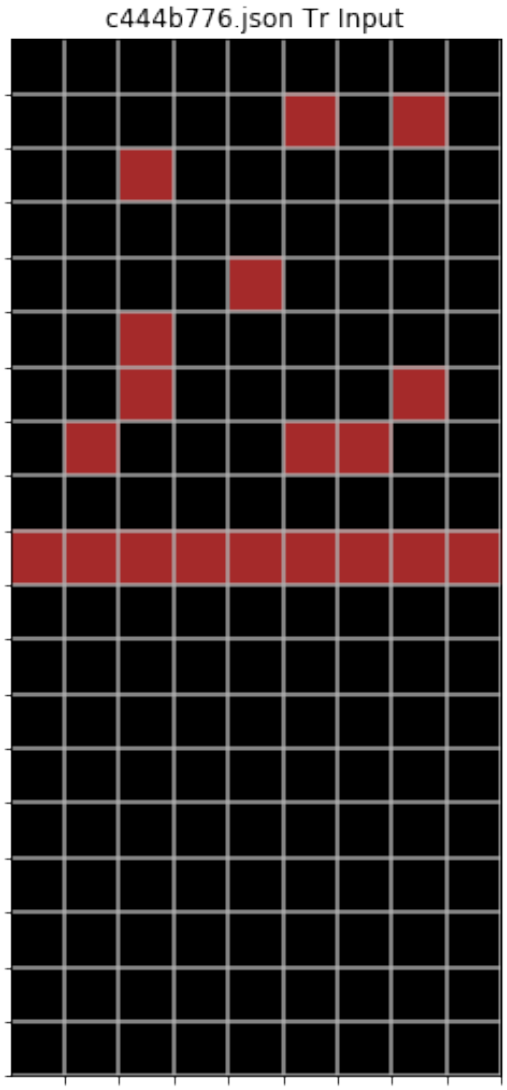

c444b776.json Tr Input


c444b776.json Tr Output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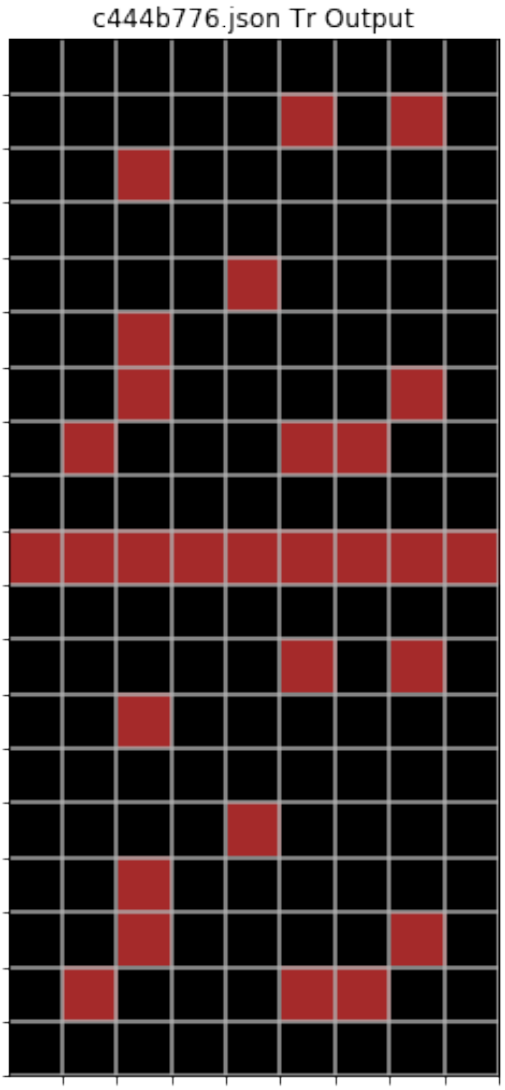
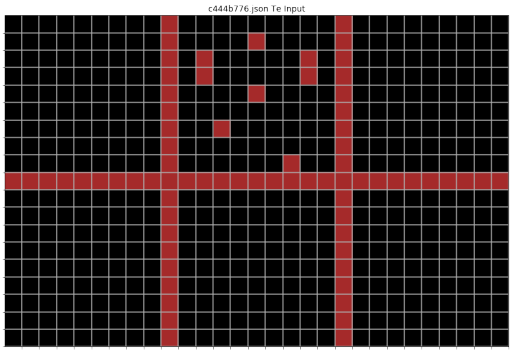
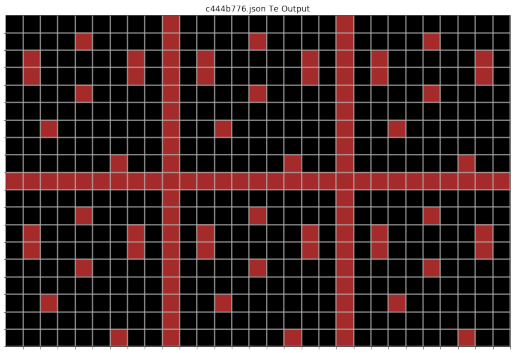

c444b776.json Tr Output


c444b776.json Te Input


c444b776.json Te Output

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i = 31
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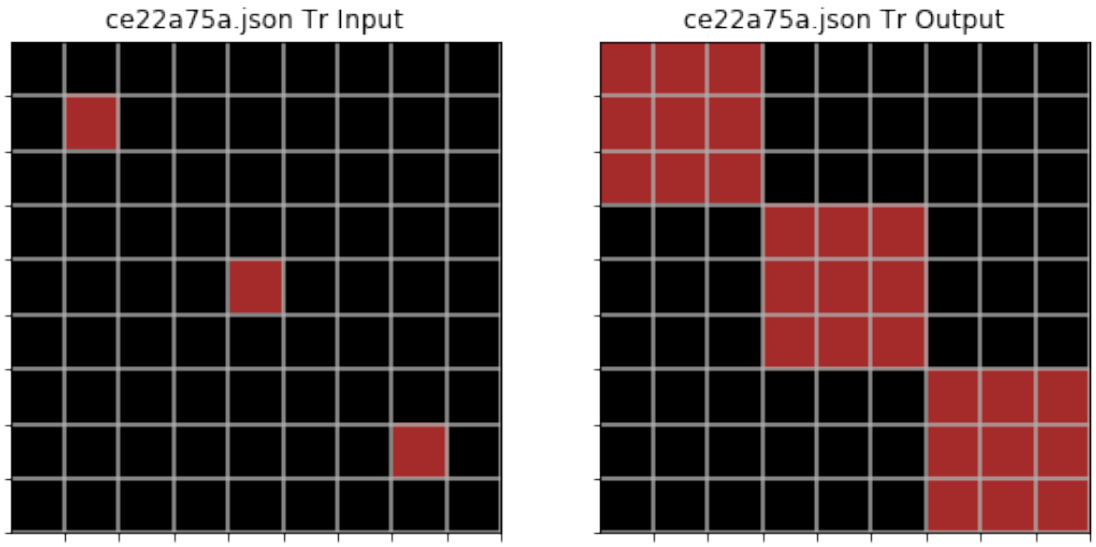
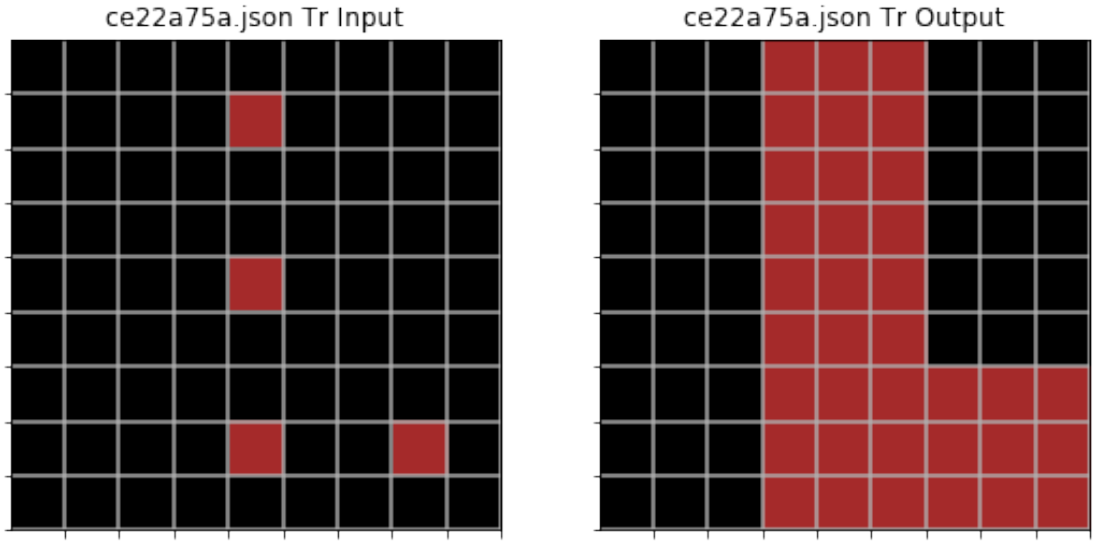

ce22a75a.json Tr Input
ce22a75a.json Tr Output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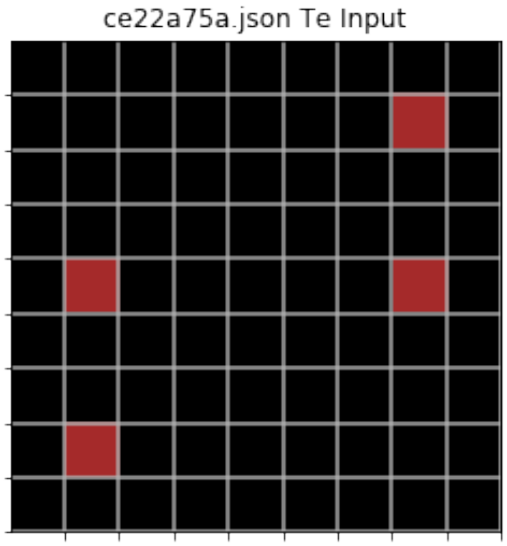
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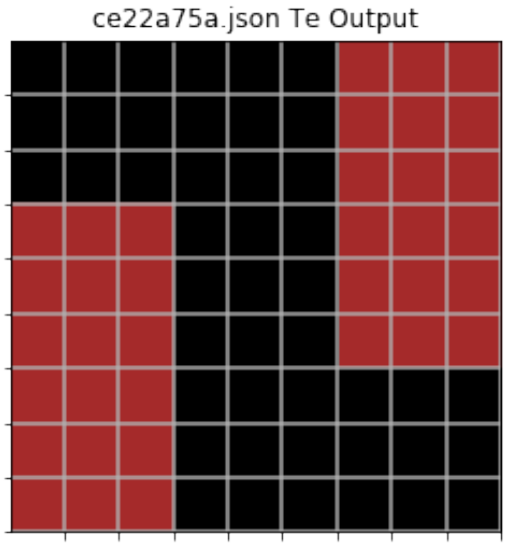
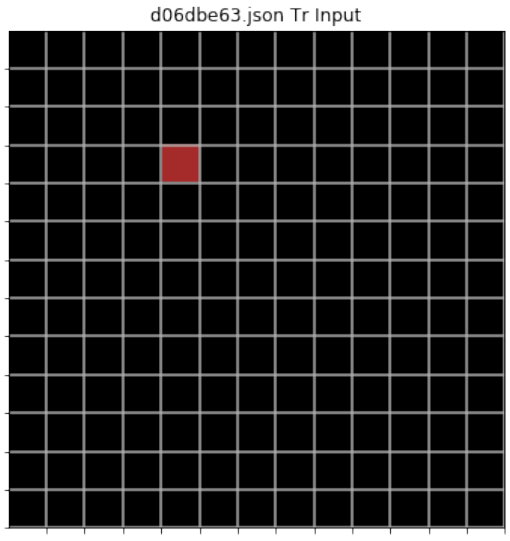
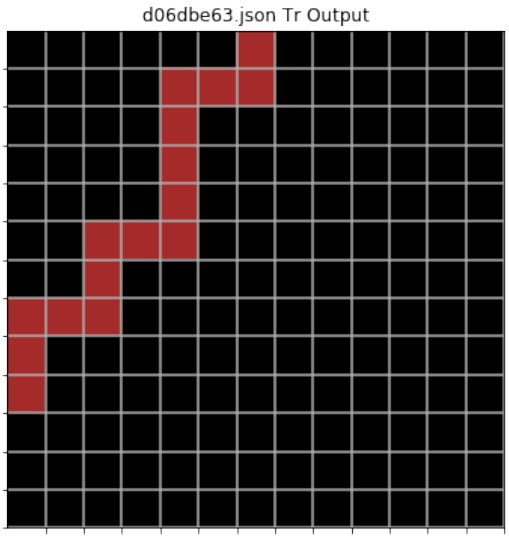
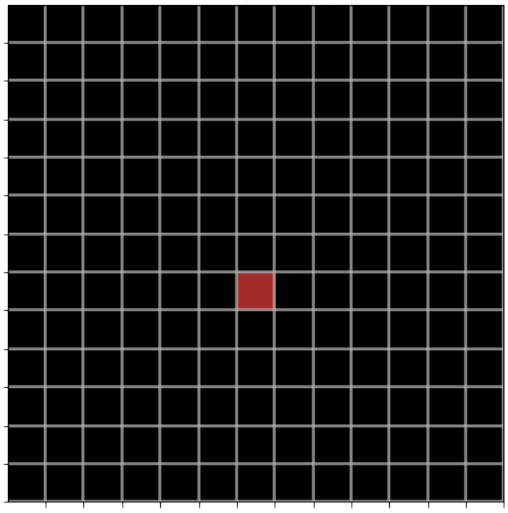

ce22a75a.json Te Output

i = 32

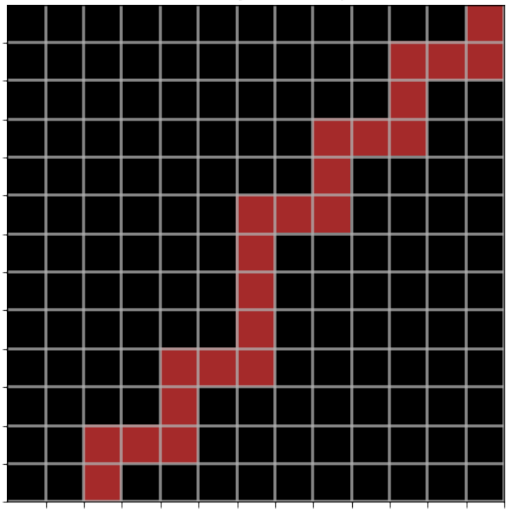

d06dbe63.json Tr Input


d06dbe63.json Tr Output

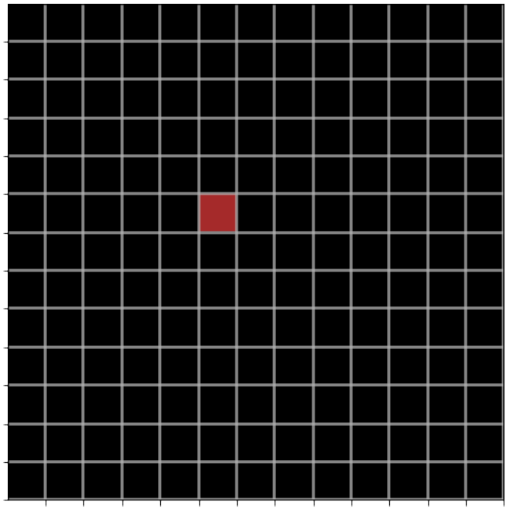
d06dbe63.json Tr Input



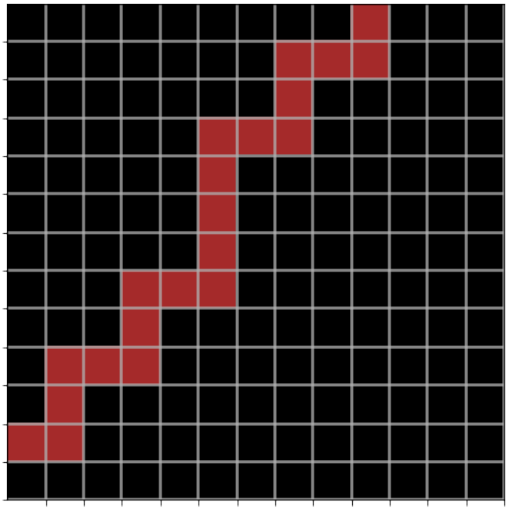
d06dbe63.json Tr Output



d06dbe63.json Te Input



d06dbe63.json Te Output



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i = 33
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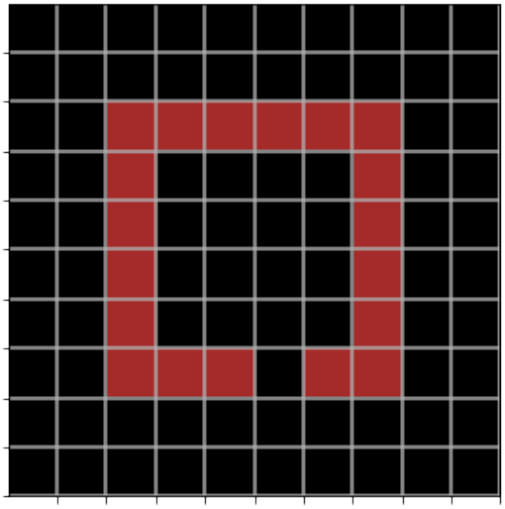
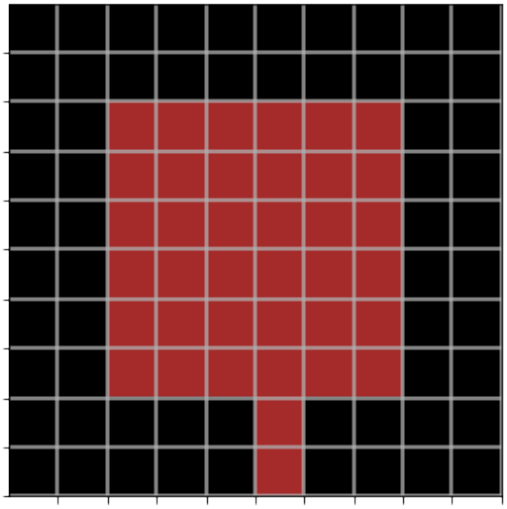
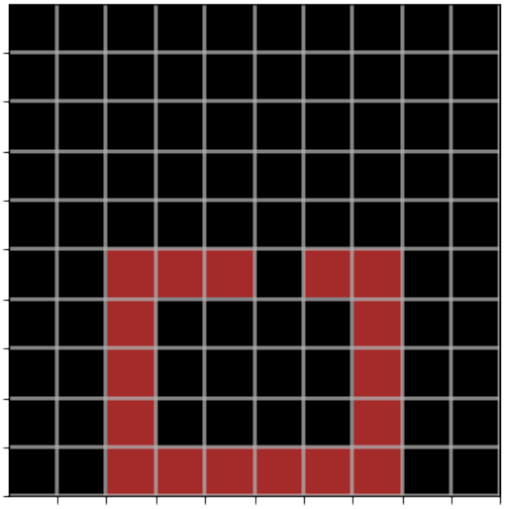
d4f3cd78.json Tr Input



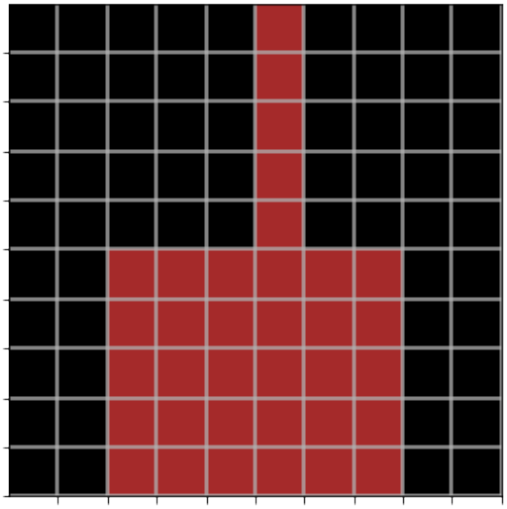
d4f3cd78.json Tr Output

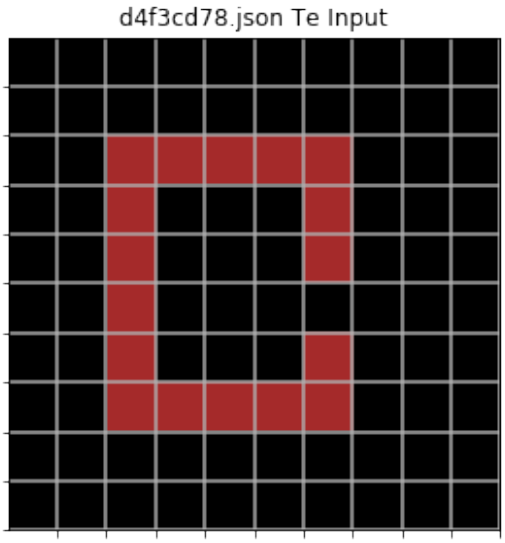


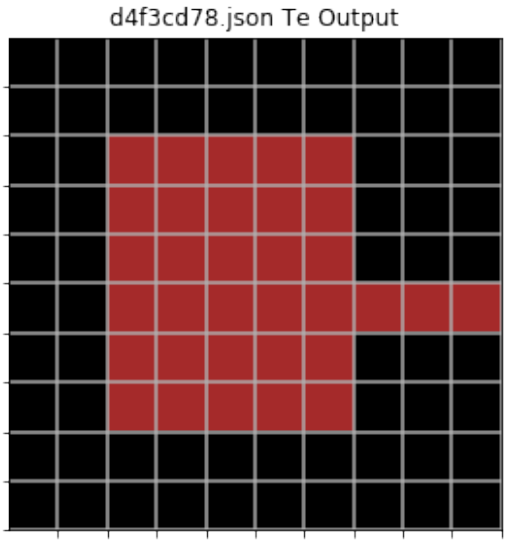
d4f3cd78.json Tr Input



d4f3cd78.json Tr Output




d4f3cd78.json Te Input


d4f3cd78.json Te Output

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i = 34
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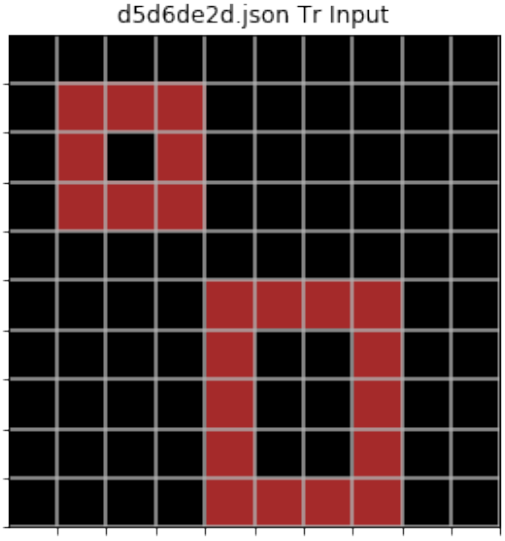
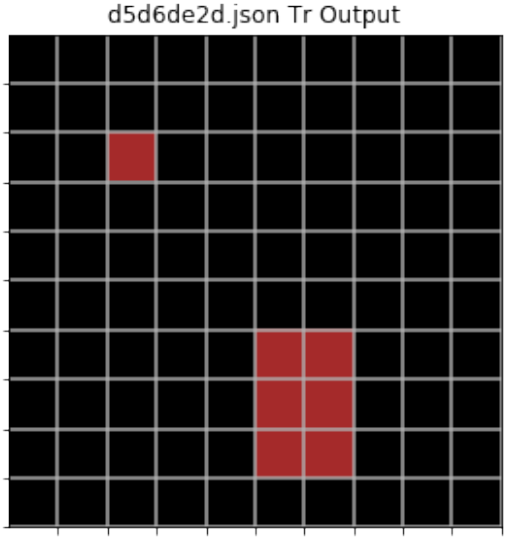
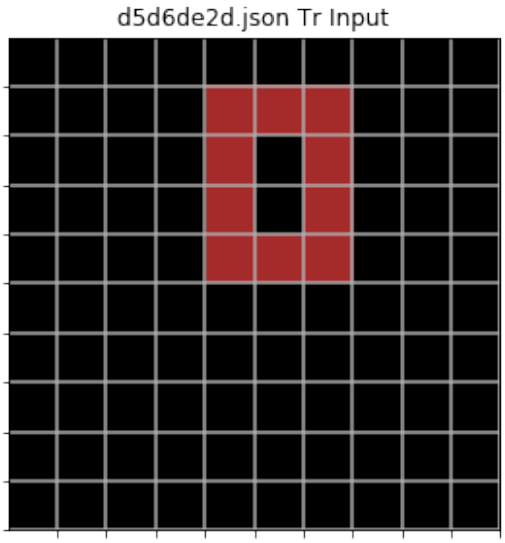
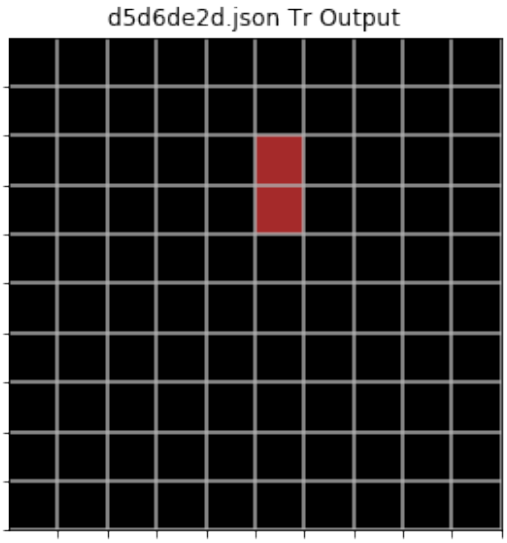
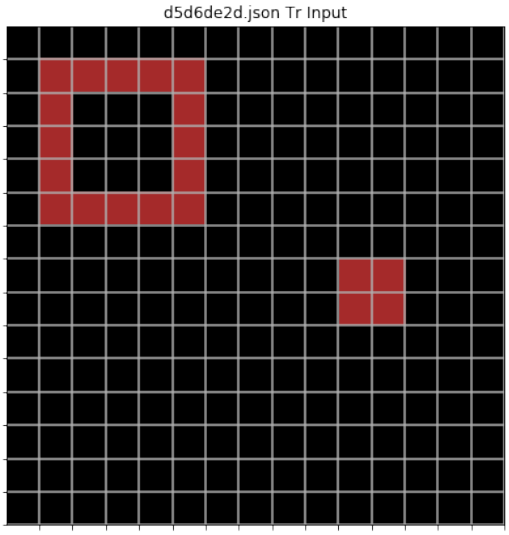
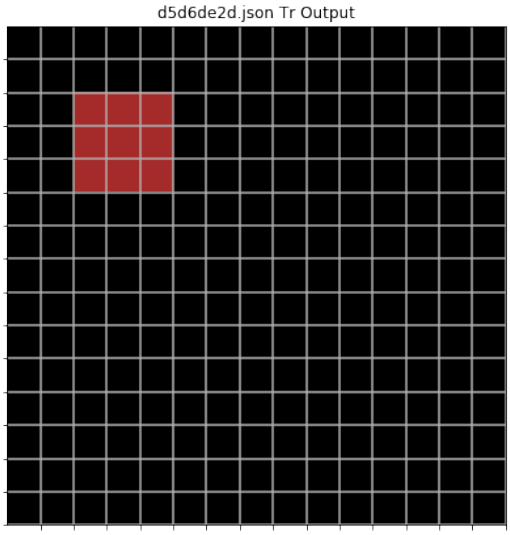

d5d6de2d.json Tr Input

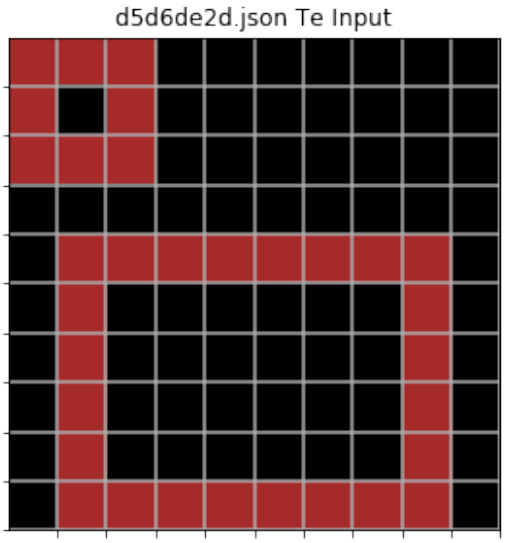

d5d6de2d.json Tr Output

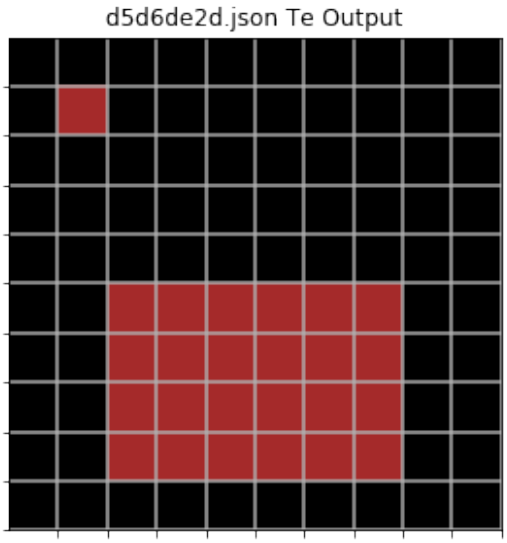

d5d6de2d.json Tr Input


d5d6de2d.json Tr Output


d5d6de2d.json Tr Input


d5d6de2d.json Tr Output


d5d6de2d.json Te Input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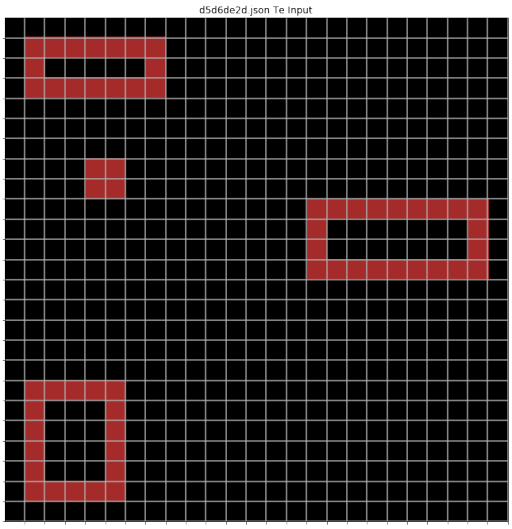
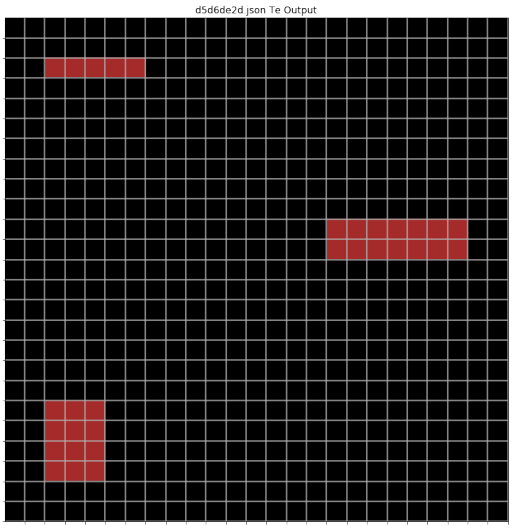

d5d6de2d.json Te Input


d5d6de2d.json Te Output

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i = 35
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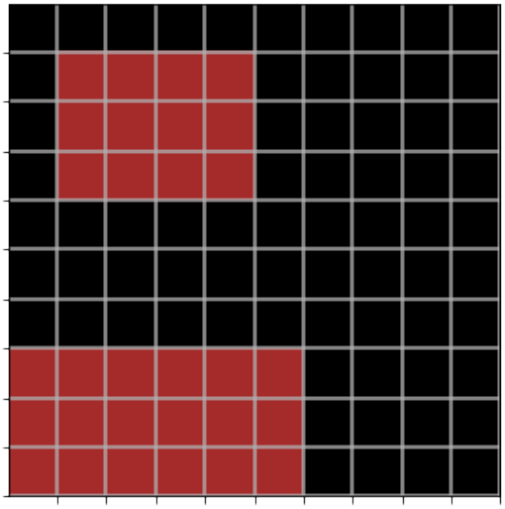
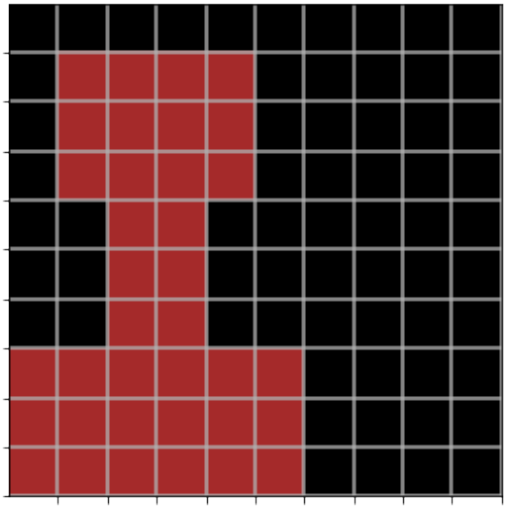
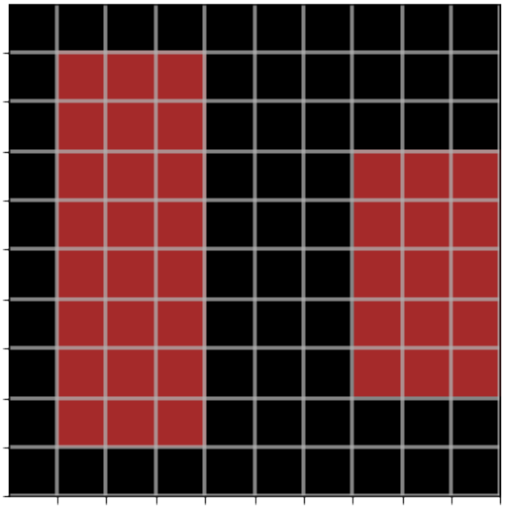
d6ad076f.json Tr Input



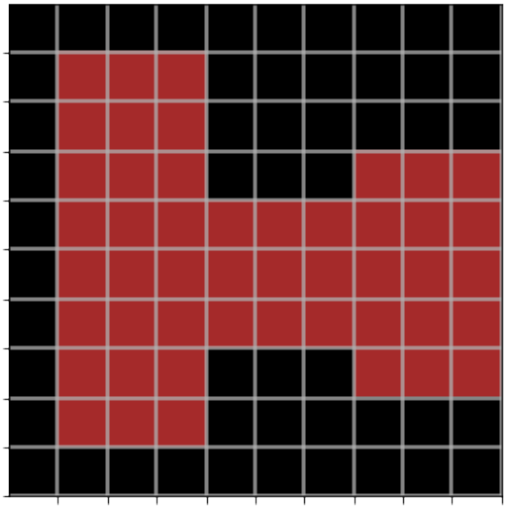
d6ad076f.json Tr Output

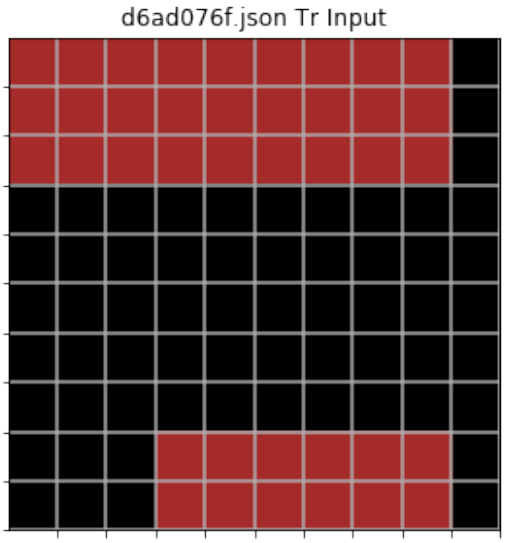


d6ad076f.json Tr Input



d6ad076f.json Tr Output

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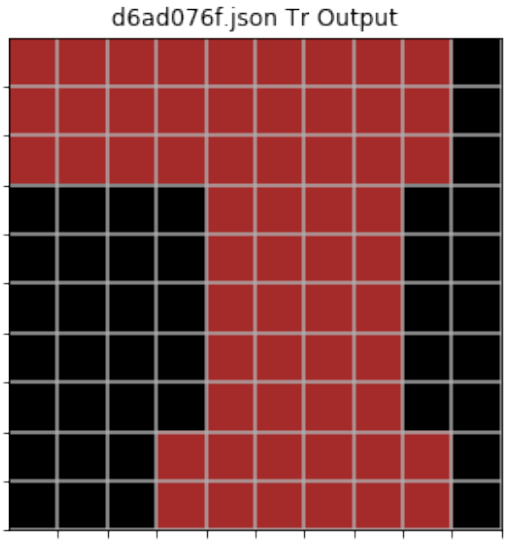
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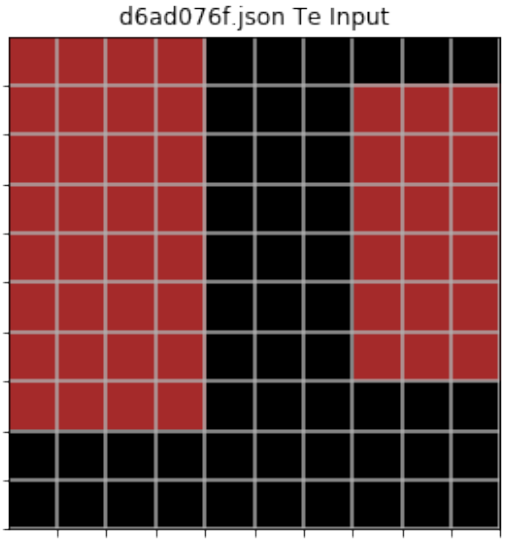
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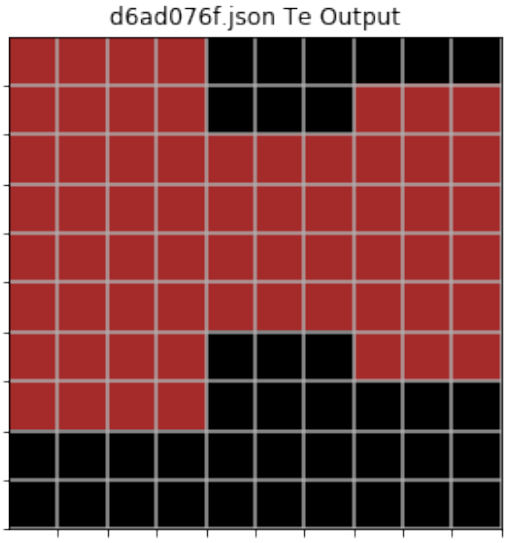
d6ad076f.json Te Output

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i = 36
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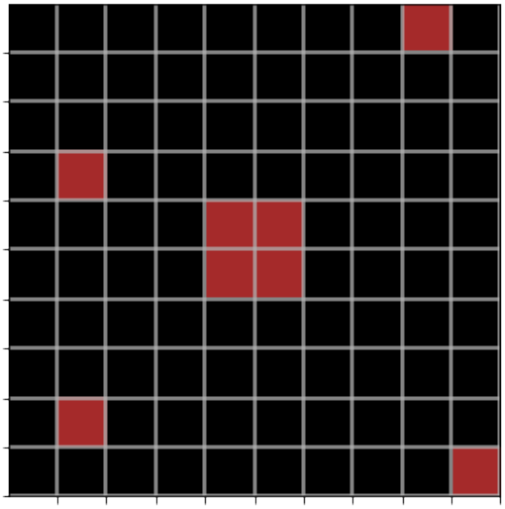
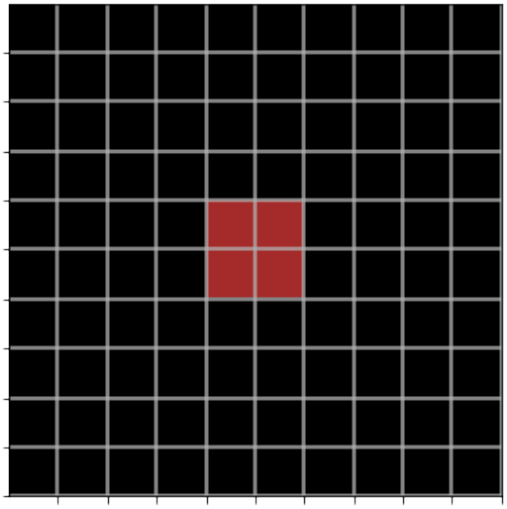
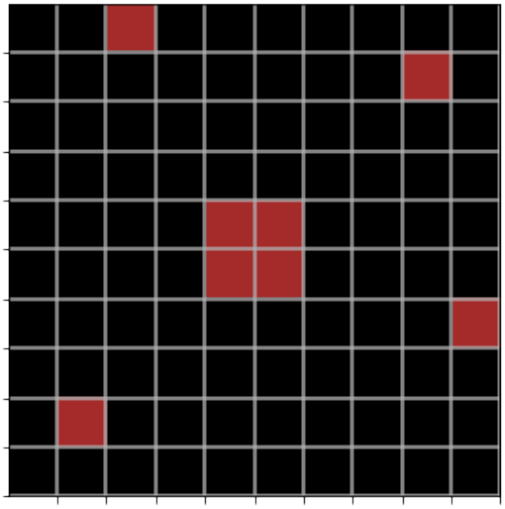
d89b689b.json Tr Input



d89b689b.json Tr Output



d89b689b.json Tr Input



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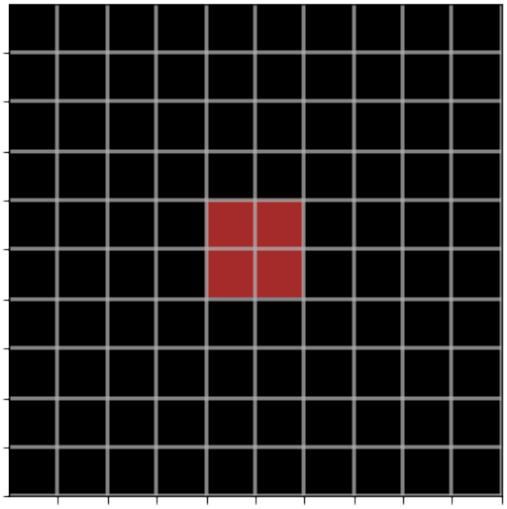

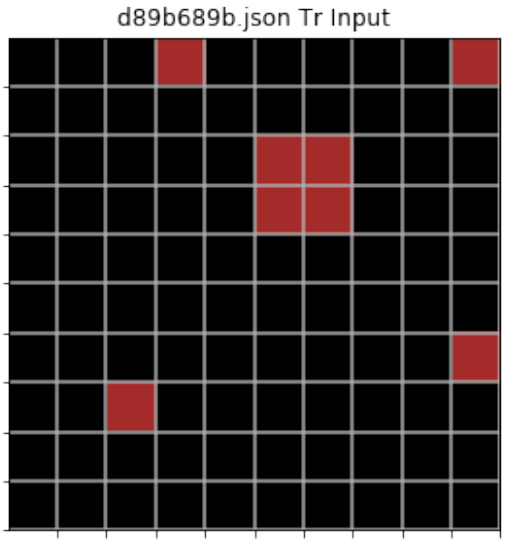
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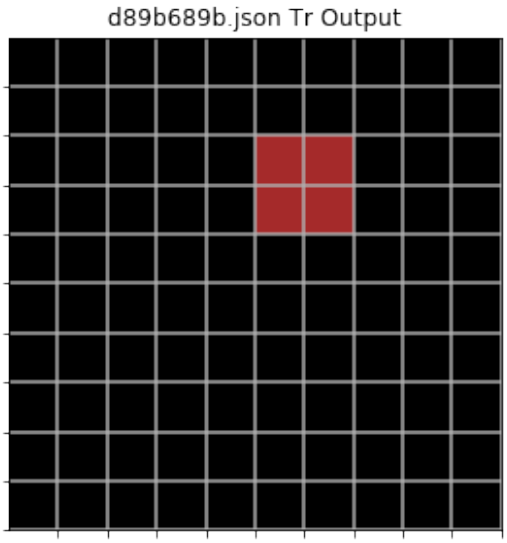
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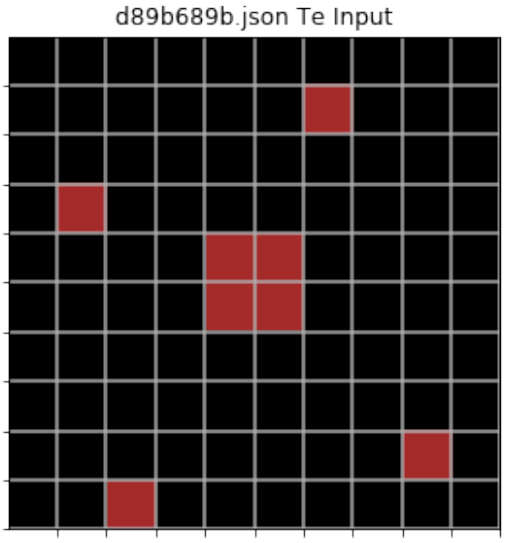
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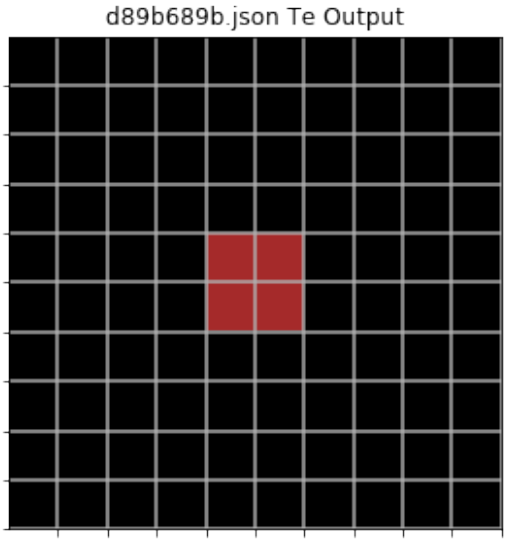
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i = 37
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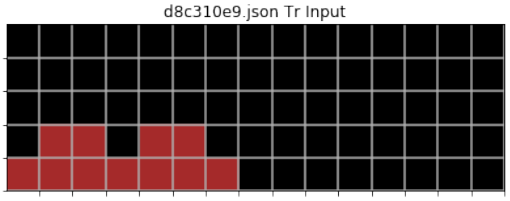
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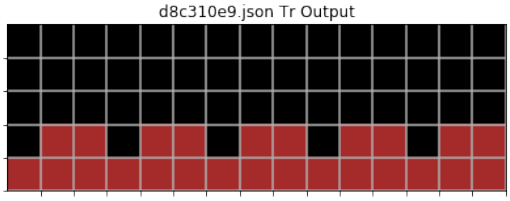
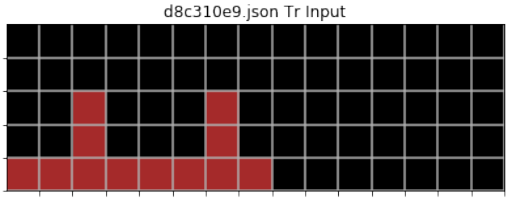

d8c310e9.json Tr Output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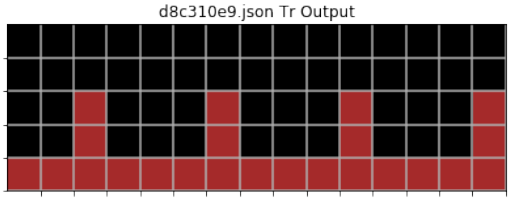
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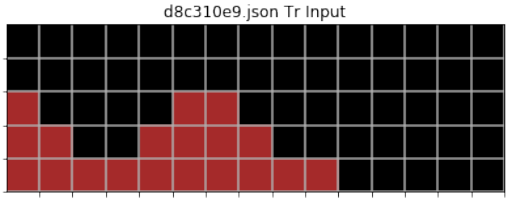
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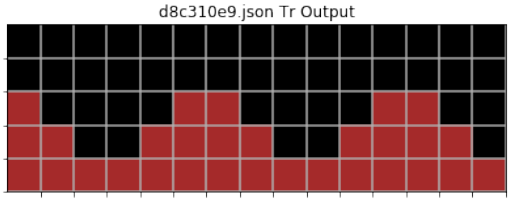
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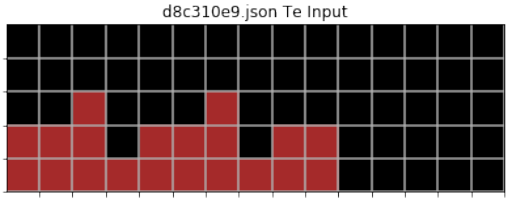
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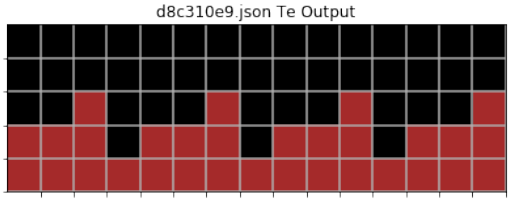
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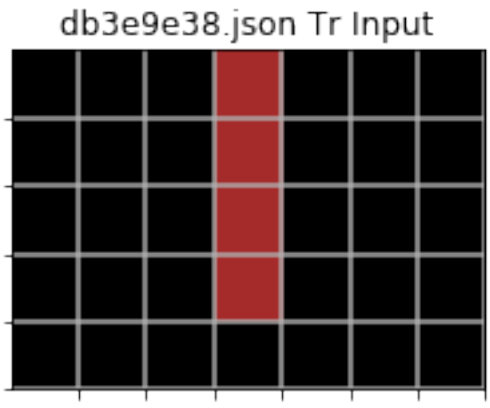
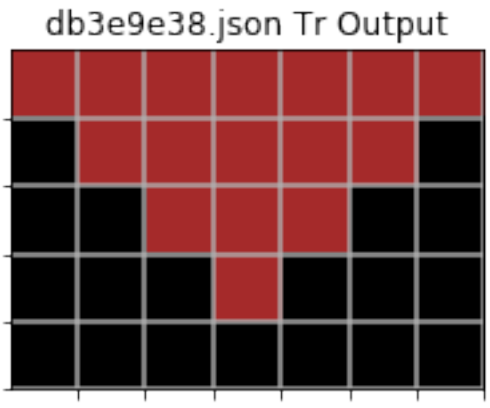
i = 38


db3e9e38.json Tr Input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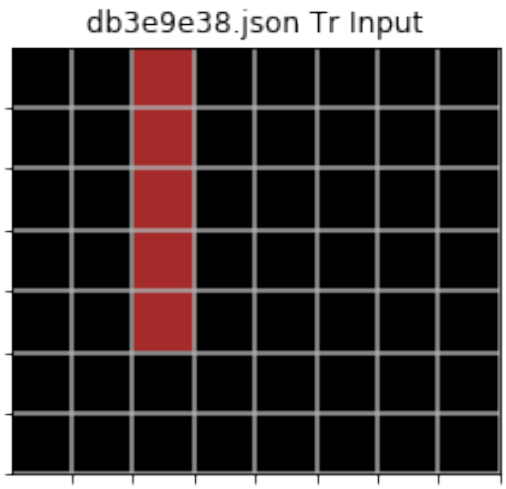
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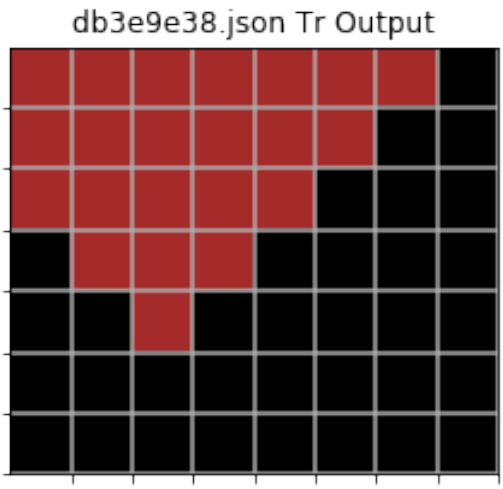
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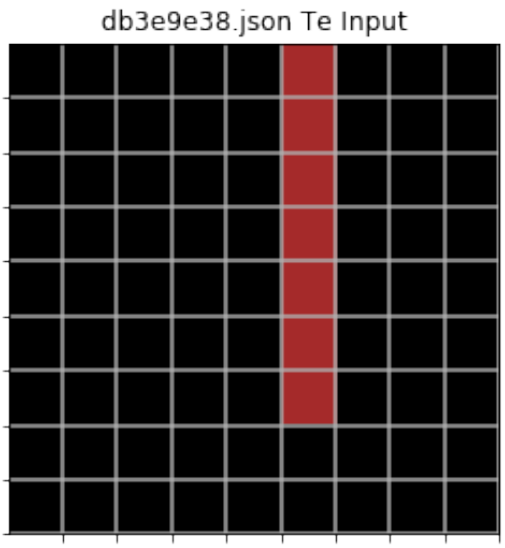
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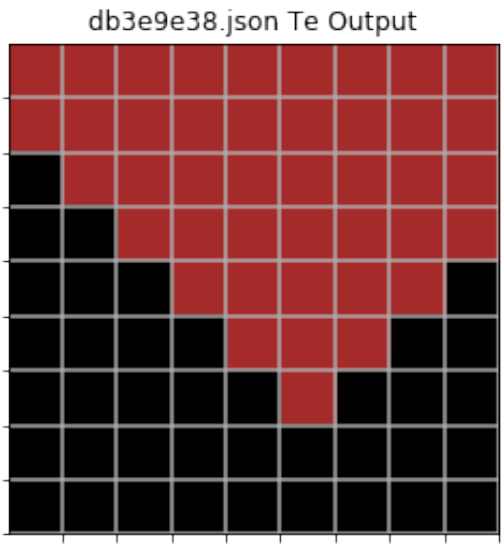
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i = 39
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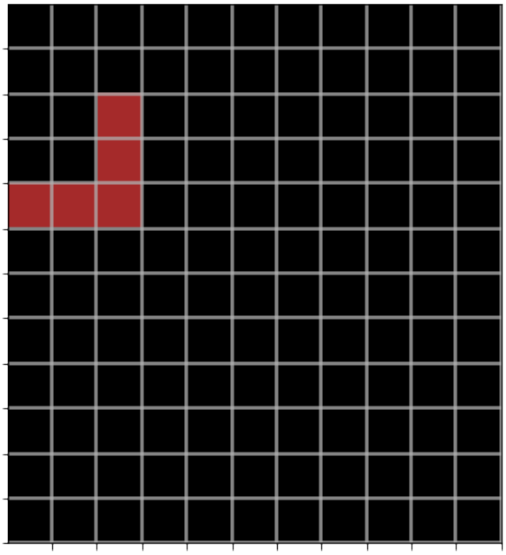
e21d9049.json Tr Input



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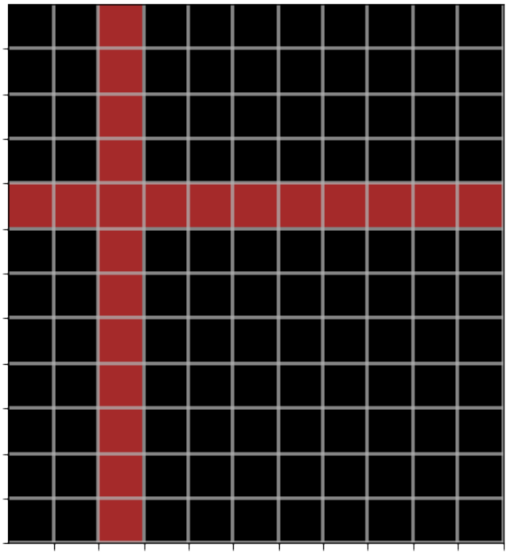

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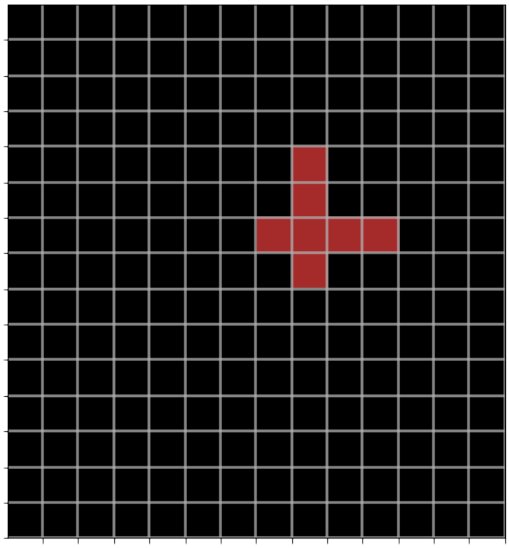

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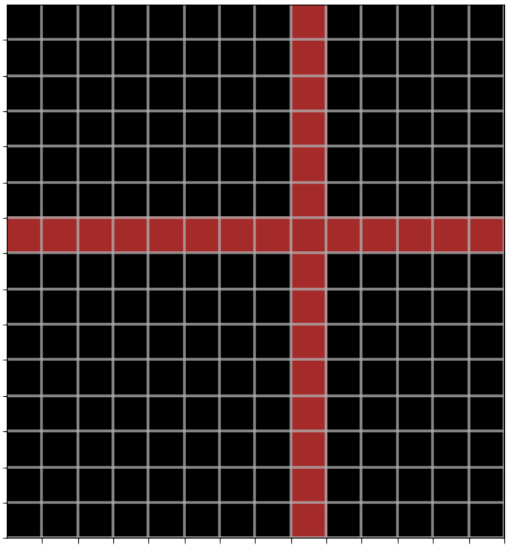

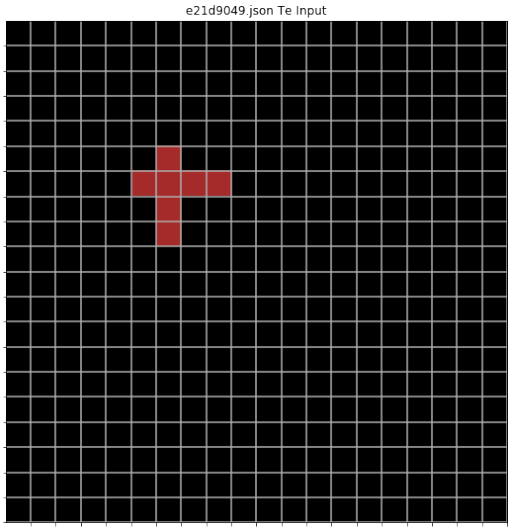
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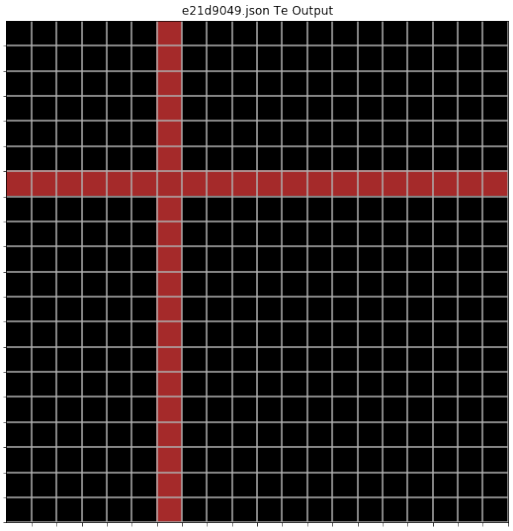
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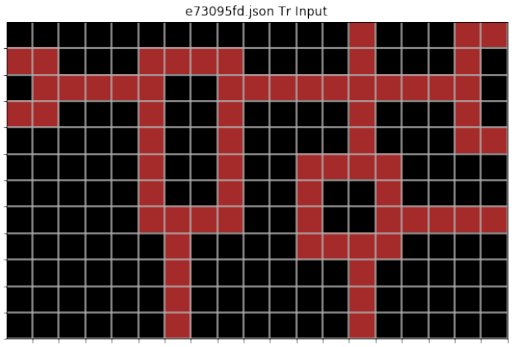
i = 40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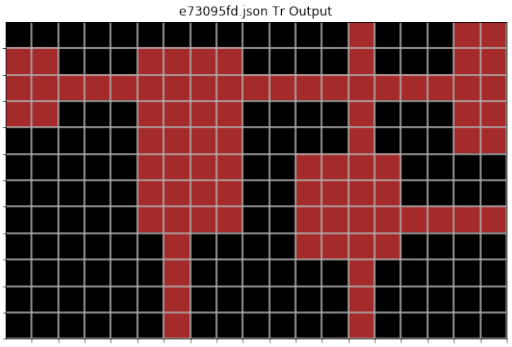
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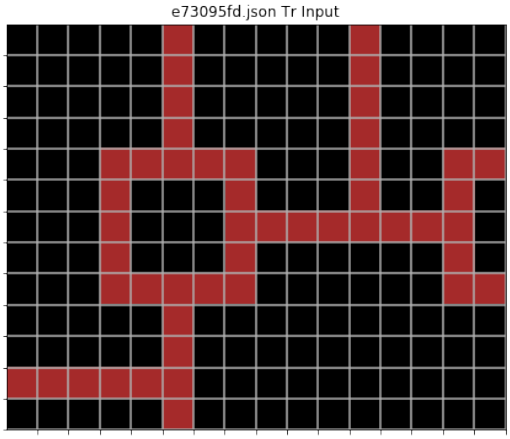
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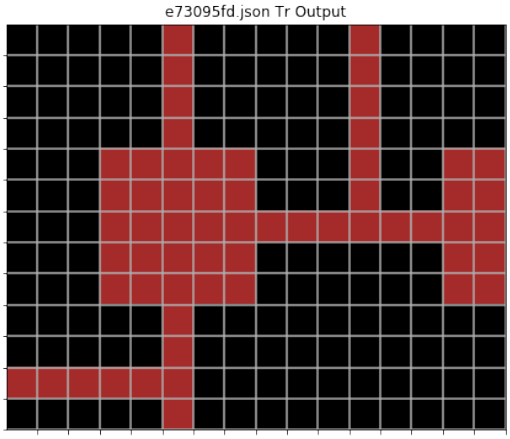
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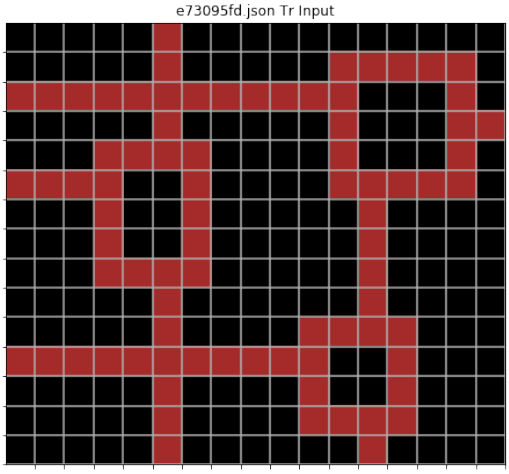
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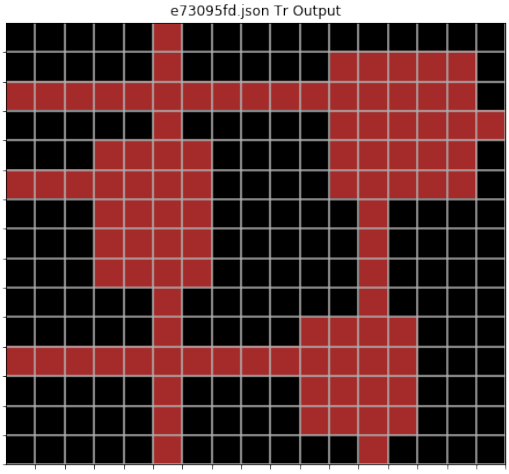
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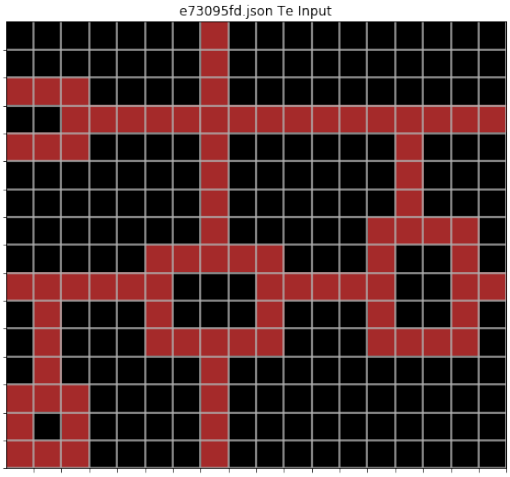
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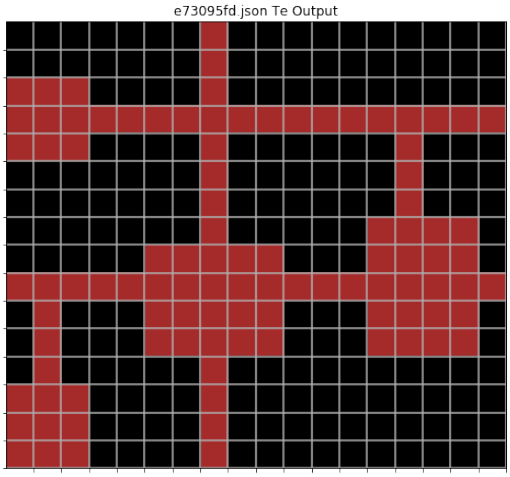
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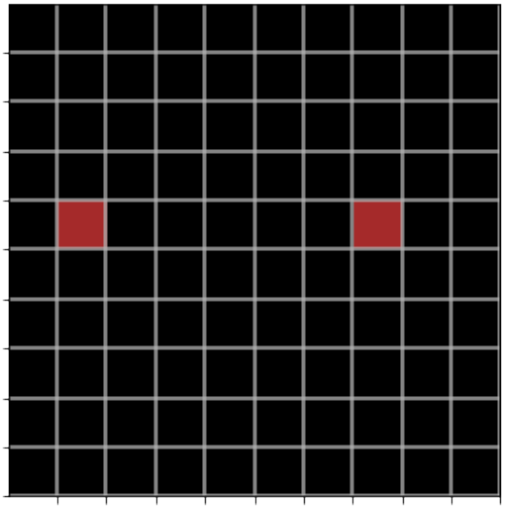
i = 41

e9614598.json Tr Input



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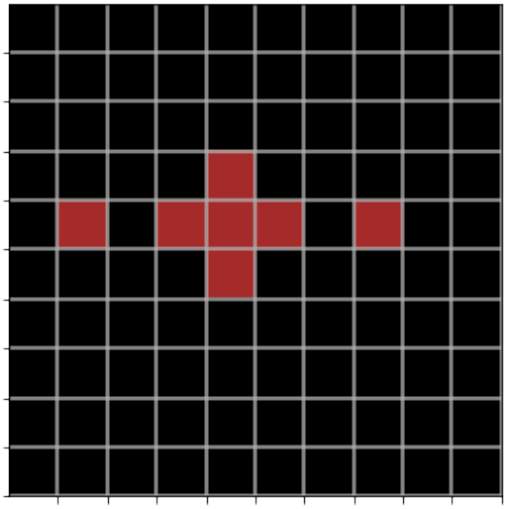

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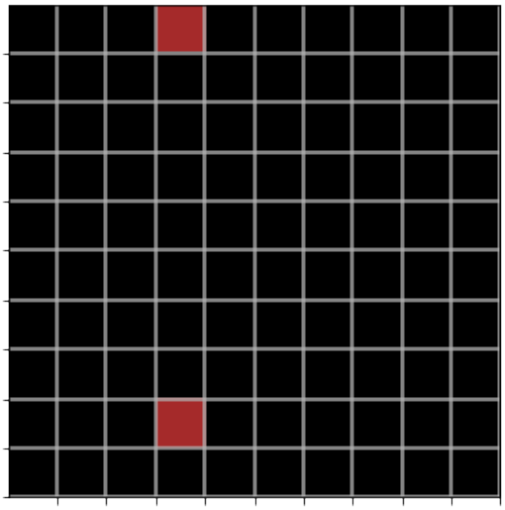

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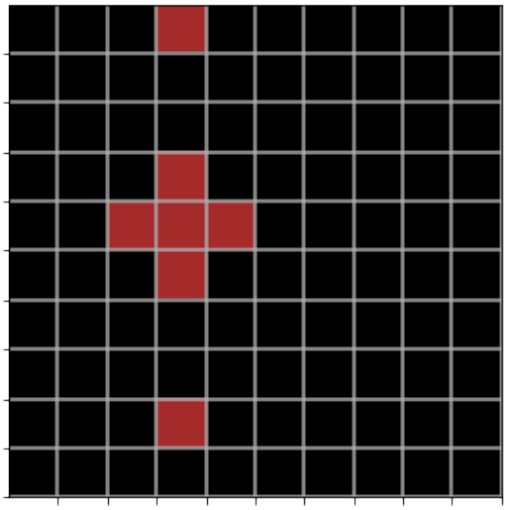

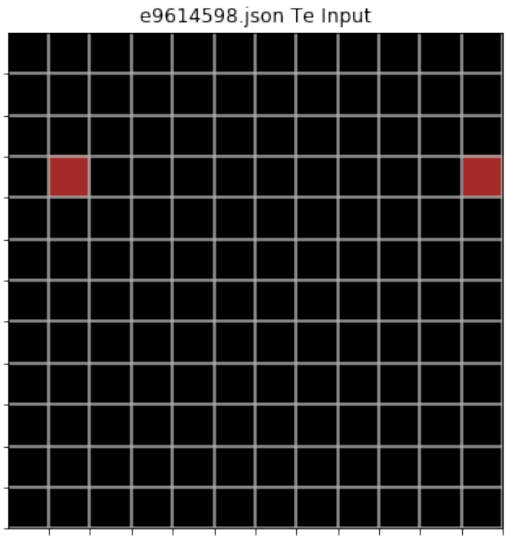
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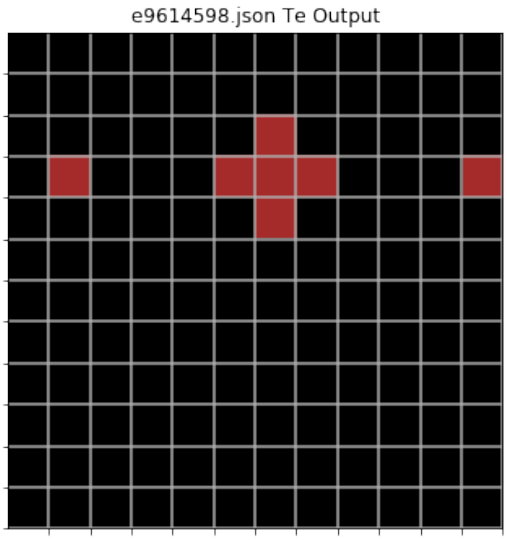
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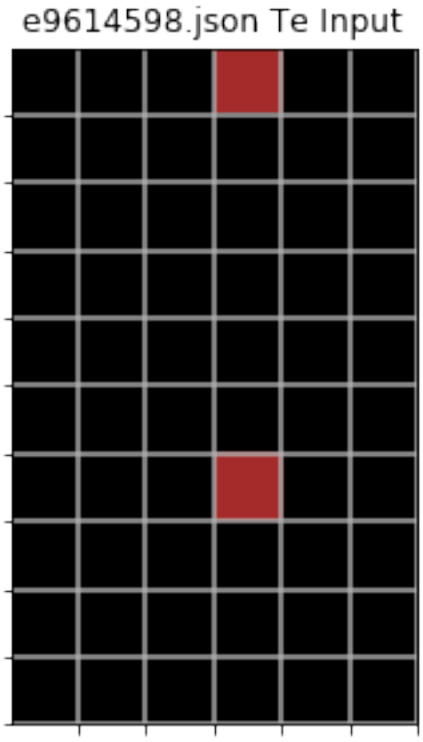
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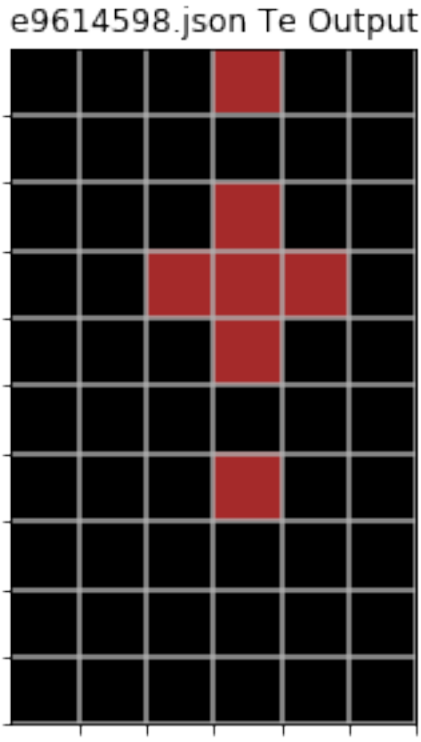
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ec883f72.json Tr Input

ec883f72.json Tr Output

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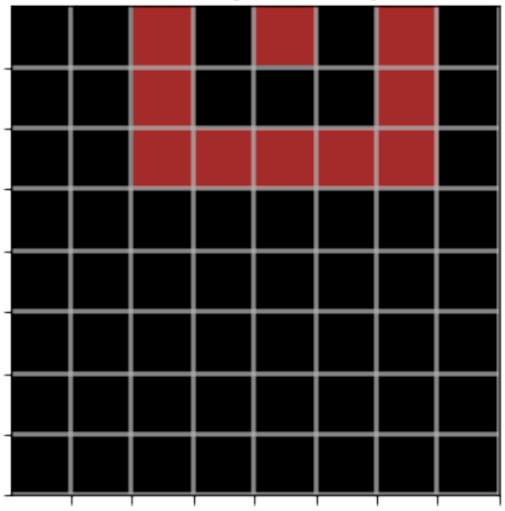

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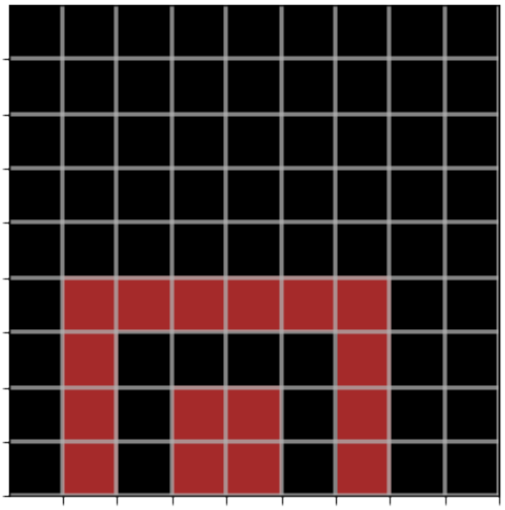

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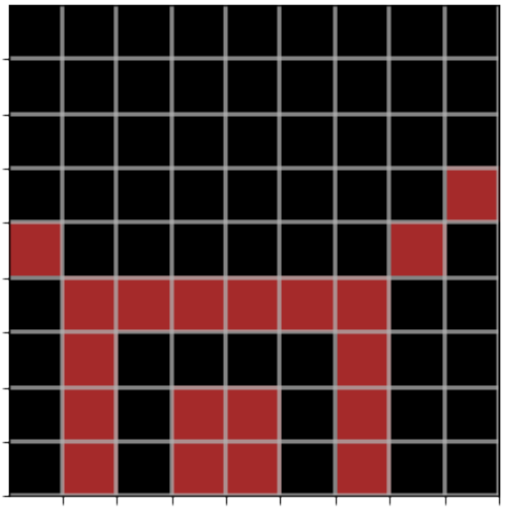

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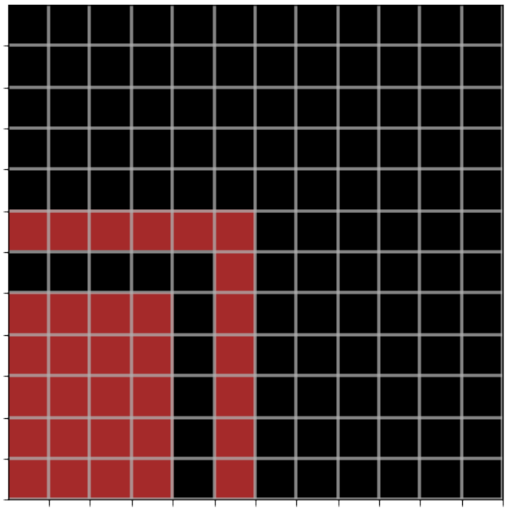

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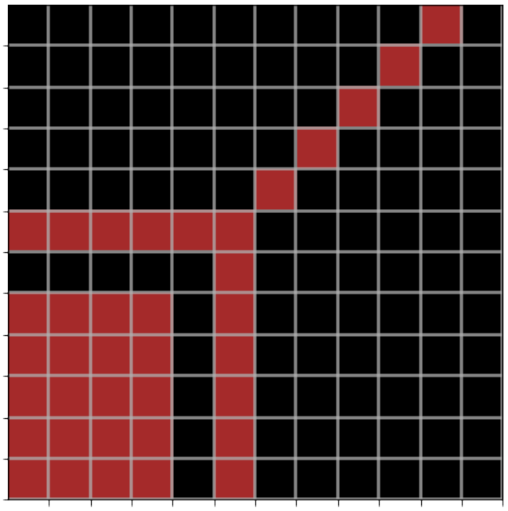

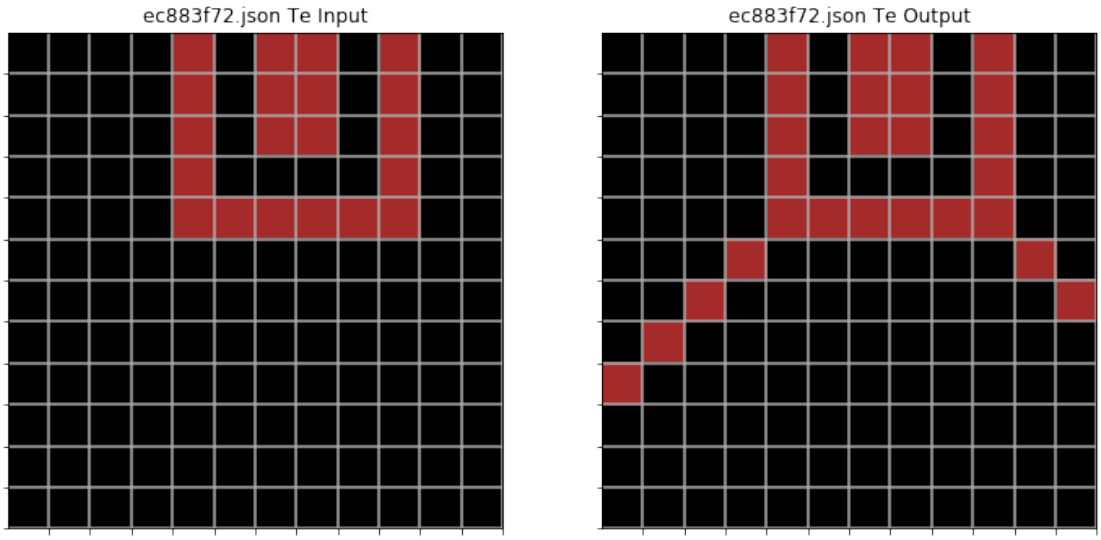

In [ ]: