Resolutions in 5 Dimensions

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Contents

1 H-index = 1

1.0 Classification

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1))
```

1.1 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1)); lvl=0; h,r-ind=1,1
```

2 H-index = 2

2.0 Classification

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,1,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,1,0,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,0,0,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,1,2,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(1,0,2,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(1,2,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,1,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,1,1,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,0,1,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,1,0,2,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(1,1,2,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,0,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,1,1,2,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2))
```

2.1 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,2)); lvl=0; h,r-ind=2,2
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,1),(0,0,0,1,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,2),(0,0,0,1,1)); lvl=1; h,r-ind=1,1
```

2.2 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,2)); lvl=0; h,r-ind=2,4
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,1,2),(0,0,1,0,0),(0,0,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,1,0,0),(0,0,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,1,1,2),(0,0,1,1,1)); lvl=1; h,r-ind=1,1
```

2.3 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,2)); lvl=0; h,r-ind=2,8
  [5,5]((1,0,0,0,0),(0,0,0,1,0),(0,1,1,1,2),(0,1,0,0,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,1,2),(0,1,0,0,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,2),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
```

2.4 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2)); lvl=0; h,r-ind=2,16
  [5,5]((0,0,0,1,0),(1,1,1,1,2),(0,1,0,0,0),(1,1,1,1,1),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(1,1,1,1,2),(0,1,0,0,0),(1,1,1,1,1),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(1,1,1,1,1),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2),(1,1,1,1,1),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2),(0,1,0,0,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
```

3 H-index = 3

3.0 Classification

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,1,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,0,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,1,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(1,0,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(1,3,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,2,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,0,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,2,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(2,0,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(2,3,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,1,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,1,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,2,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,0,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,0,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,1,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,2,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,0,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,1,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,1,1,3,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(1,2,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(2,1,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,0,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,2,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,0,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,2,0,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(2,2,3,0,0),(0,0,0,1,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,2,0,3))
```

```
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,1,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,2,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,1,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,2,1,3,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,0,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,1,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,1,2,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(1,2,1,3,0),(0,0,0,0,1))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,1,1,3,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,0,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,0,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,0,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(2,2,2,3,0),(0,0,0,0,1))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,1,3))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,2,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,1,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,1,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,1,2,1,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,1,1,3))
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,2,3))
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,2,3))
```

3.1 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,1,3)); lvl=0; h,r-ind=3,3
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,2,3),(0,0,0,1,0)); lvl=1; h,r-ind=3,3
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,1),(0,0,0,1,0)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,2,3),(0,0,0,1,1)); lvl=2; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,3),(0,0,0,2,3)); lvl=1; h,r-ind=3,3
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,2),(0,0,0,1,3)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,2,3),(0,0,0,1,2)); lvl=2; h,r-ind=1,1
```

3.2 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,0,2,3)); lvl=0; h,r-ind=3,3
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,1),(0,0,0,1,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,2,3),(0,0,0,1,1)); lvl=1; h,r-ind=1,1
```

3.3 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,3)); lvl=0; h,r-ind=3,9
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,2,2,3),(0,0,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,2,2,3),(0,0,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,1,3),(0,0,1,0,0),(0,0,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,1,1,3),(0,0,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,1,0,0),(0,0,2,2,3)); lvl=1; h,r-ind=3,9
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,1,1,1)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,2,2,3),(0,0,0,1,0),(0,0,1,1,1)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,2,2,3),(0,0,1,0,0),(0,0,1,1,1)); lvl=2; h,r-ind=1,1
```

3.4 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,0,2,2,3)); lvl=0; h,r-ind=3,9
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,0,1,1,1),(0,0,1,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,2,2,3),(0,0,1,1,1),(0,0,1,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,2,2,3),(0,0,0,1,0),(0,0,1,1,1)); lvl=1; h,r-ind=1,1
```

3.5 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,3)); lvl=0; h,r-ind=3,27
  [5,5]((1,0,0,0,0),(0,0,0,1,0),(0,1,0,0,0),(0,2,2,2,3),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,0,0,0),(0,2,2,2,3),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,2,3),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,0,1,0),(0,1,1,1,3),(0,1,0,0,0),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,1,3),(0,1,0,0,0),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,3),(0,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(0,2,2,2,3)); lvl=1; h,r-ind=3,27
    [5,5]((1,0,0,0,0),(0,2,2,2,3),(0,1,0,0,0),(0,0,0,1,0),(0,1,1,1,1)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,0,0,0),(0,0,0,1,0),(0,1,1,1,1)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,2,2,2,3),(0,0,0,1,0),(0,1,1,1,1)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,2,2,2,3),(0,1,0,0,0),(0,1,1,1,1)); lvl=2; h,r-ind=1,1
```

3.6 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,2,3)); lvl=0; h,r-ind=3,27
  [5,5]((1,0,0,0,0),(0,0,0,1,0),(0,1,0,0,0),(0,2,2,3,3),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,1,2,3),(0,1,0,0,0),(0,2,2,3,3),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,2,3),(0,2,2,3,3),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,2,3),(0,1,0,0,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,3,3),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,0,1,0),(0,1,1,2,2),(0,1,0,0,0),(0,2,2,3,3)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,1,2,3),(0,1,1,2,2),(0,1,0,0,0),(0,2,2,3,3)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,2,3),(0,1,1,2,2),(0,2,2,3,3)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,2,2),(0,2,2,3,3)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,1,2,3),(0,0,0,1,0),(0,1,1,2,2),(0,1,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,1,1,2,3),(0,0,0,1,0),(0,1,1,2,2)); lvl=1; h,r-ind=1,1
```

3.7 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,2,2,2,3)); lvl=0; h,r-ind=3,27
  [5,5]((1,0,0,0,0),(0,2,2,2,3),(0,0,0,1,0),(0,1,1,1,1),(0,1,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(0,1,1,1,1),(0,1,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,2,2,2,3),(0,1,1,1,1),(0,1,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,0,1,0,0),(0,2,2,2,3),(0,0,0,1,0),(0,1,1,1,1)); lvl=1; h,r-ind=1,1
```

3.8 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,3)); lvl=0; h,r-ind=3,81
  [5,5]((0,0,0,1,0),(0,1,0,0,0),(1,1,1,1,2),(2,2,2,2,3),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,1,0,0,0),(1,1,1,1,2),(2,2,2,2,3),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,2),(2,2,2,2,3),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(2,2,2,2,3),(1,0,0,0,0)); lvl=1; h,r-ind=3,81
```

```
    [5,5]((2,2,2,2,3),(0,1,0,0,0),(0,0,0,1,0),(1,1,1,1,1),(0,0,1,0,0)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,0,1,0),(1,1,1,1,1),(0,0,1,0,0)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,0,0,1,0),(1,1,1,1,1),(0,0,1,0,0)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,1,0,0,0),(1,1,1,1,1),(0,0,1,0,0)); lvl=2; h,r-ind=1,1
    [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,1,0,0,0),(0,0,0,1,0),(1,1,1,1,1)); lvl=2; h,r-ind=1,1
  [5,5]((0,0,0,1,0),(1,1,1,1,3),(0,1,0,0,0),(1,1,1,1,2),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(1,1,1,1,3),(0,1,0,0,0),(1,1,1,1,2),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,3),(1,1,1,1,2),(1,0,0,0,0)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,3),(0,1,0,0,0),(1,1,1,1,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(0,1,0,0,0),(1,1,1,1,2),(2,2,2,2,3)); lvl=1; h,r-ind=1,1
```

3.9 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,2,3)); lvl=0; h,r-ind=3,81
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,1,1,2,3),(0,0,1,0,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(0,0,1,0,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((1,1,1,2,3),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,0),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(0,0,0,1,0),(1,0,0,0,0),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(0,0,0,1,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,2,2)); lvl=1; h,r-ind=1,1
  [5,5]((0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,1,1,2,3),(0,0,1,0,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(0,0,1,0,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(0,0,1,0,0),(1,0,0,0,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(1,1,1,2,3),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,0,0,0,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((0,1,0,0,0),(0,0,0,1,0),(1,0,0,0,0),(2,2,2,3,3),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
```

3.10 Resolved

```
[5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(2,2,2,2,3)); lvl=0; h,r-ind=3,81
  [5,5]((2,2,2,2,3),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(0,1,0,0,0),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,0,1,0,0),(0,0,0,1,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,1,0,0,0),(0,0,0,1,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
  [5,5]((1,0,0,0,0),(2,2,2,2,3),(0,1,0,0,0),(0,0,1,0,0),(1,1,1,1,1)); lvl=1; h,r-ind=1,1
```