# Appendix A. Attachments

#### A.1. Attachments - Example 1

## A.1.1. Example 1 - iSOMA

```
Number of unique solutions: 50
1, 0, 1, 3, 0, 3, 1, 0, 1
1, 0, 1, 2, 0, 2, 1, 0, 1
1, 3, 1, 0, 0, 3, 1, 0, 1
1, 3, 0, 1, 0, 3, 2, 1, 2
0, 3, 0, 1, 1, 3, 0, 1, 0
1, 3, 3, 0, 0, 3, 1, 0, 1
1, 2, 2, 0, 0, 2, 1, 0, 1
0, 2, 2, 1, 0, 1, 2, 1, 2
0, 3, 1, 3, 0, 1, 2, 3, 2
0, 2, 1, 0, 2, 1, 3, 0, 3
0, 3, 1, 3, 1, 0, 2, 3, 2
0, 2, 2, 1, 2, 1, 0, 1,
1, 3, 1, 0, 0, 1, 3, 0, 3
0, 3, 3, 1, 0, 1, 3, 1, 3
1, 3, 3, 0, 3, 0, 1, 0, 1
1, 2, 2, 0, 1, 0, 2, 0, 2
0, 1, 0, 2, 0, 1, 2, 1, 2
1, 2, 1, 0, 0, 1, 2, 0, 2
0, 2, 2, 1, 1, 2, 0, 1, 0
1, 0, 1, 2, 1, 0, 2, 0, 2
0, 3, 1, 0, 1, 3, 2, 0, 2
1, 0, 1, 2, 2, 0, 1, 0, 1
1, 0, 1, 3, 3, 0, 1, 0, 1
0, 2, 0, 1, 1, 2, 0, 1, 0
0, 2, 0, 1, 0, 1, 2, 1,
1, 2, 1, 0, 1, 0, 2, 0, 2
0, 2, 1, 0, 1, 2, 3, 0, 3
0, 3, 1, 0, 3, 1, 2, 0, 2
0, 1, 0, 3, 0, 1, 3, 1, 3
1, 2, 2, 0, 2, 0, 1, 0, 1
1, 2, 2, 0, 0, 1, 2, 0, 2
1, 3, 0, 3, 0, 1, 2, 3,
1, 3, 3, 0, 1, 0, 3, 0, 3
1, 2, 0, 1, 2, 0, 3, 1,
1, 2, 0, 2, 1, 0, 3, 2, 3
0, 2, 0, 1, 1, 0, 2, 1,
1, 3, 0, 1, 3, 0, 2, 1, 2
0, 3, 3, 1, 1, 0, 3, 1, 3
0, 1, 0, 2, 1, 0, 2, 1, 2
0, 3, 0, 1, 0, 1, 3, 1, 3
0, 3, 3, 1, 3, 1, 0, 1, 0
1, 2, 1, 0, 2, 0, 1, 0, 1
0, 3, 0, 1, 3, 1, 0, 1, 0
```

```
1, 2, 1, 0, 0, 2, 1, 0, 1

1, 3, 0, 3, 1, 0, 2, 3, 2

1, 0, 1, 2, 0, 1, 2, 0, 2

1, 2, 0, 1, 0, 2, 3, 1, 3

1, 3, 1, 0, 3, 0, 1, 0, 1

1, 3, 1, 0, 1, 0, 3, 0, 3

0, 2, 2, 1, 1, 0, 2, 1, 2
```

## A.1.2. Example 1 - DE

```
Number of unique solutions: 51
1, 0, 1, 3, 0, 3, 1, 0, 1
1, 3, 1, 0, 0, 3, 1, 0, 1
1, 3, 0, 1, 0, 3, 2, 1, 2
0, 3, 0, 1, 1, 3, 0, 1, 0
0, 1, 0, 3, 1, 3, 0, 1, 0
1, 2, 2, 0, 0, 2, 1, 0, 1
0, 2, 2, 1, 0, 1, 2, 1, 2
0, 3, 1, 3, 0, 1, 2, 3, 2
1, 3, 3, 0, 0, 1, 3, 0, 3
0, 2, 1, 0, 2, 1, 3, 0, 3
1, 3, 3, 0, 0, 3, 1, 0, 1
0, 2, 2, 1, 2, 1, 0, 1, 0
0, 2, 1, 2, 1, 0, 3, 2, 3
0, 3, 3, 1, 0, 1, 3, 1, 3
0, 2, 1, 2, 0, 1, 3, 2, 3
1, 2, 2, 0, 1, 0, 2, 0, 2
0, 1, 0, 2, 0, 1, 2, 1, 2
1, 3, 3, 0, 3, 0, 1, 0, 1
1, 2, 1, 0, 0, 1, 2, 0, 2
1, 0, 1, 2, 1, 0, 2, 0, 2
1, 0, 1, 2, 2, 0, 1, 0, 1
1, 0, 1, 3, 3, 0, 1, 0, 1
0, 1, 0, 3, 1, 0, 3, 1, 3
0, 1, 0, 2, 2, 1, 0, 1, 0
0, 3, 1, 0, 1, 3, 2, 0, 2
0, 2, 0, 1, 1, 2, 0, 1, 0
0, 2, 0, 1, 0, 1, 2, 1, 2
1, 2, 1, 0, 1, 0, 2, 0, 2
0, 3, 1, 0, 3, 1, 2, 0, 2
0, 1, 0, 3, 0, 1, 3, 1, 3
1, 2, 2, 0, 2, 0, 1, 0, 1
1, 2, 2, 0, 0, 1, 2, 0, 2
1, 3, 3, 0, 1, 0, 3, 0, 3
1, 2, 0, 1, 2, 0, 3, 1, 3
1, 2, 0, 2, 1, 0, 3, 2, 3
0, 2, 0, 1, 1, 0, 2, 1, 2
1, 3, 0, 1, 3, 0, 2, 1, 2
0, 3, 3, 1, 1, 0, 3, 1, 3
0, 3, 0, 1, 1, 0, 3, 1, 3
```

1, 2, 1, 0, 2, 0, 1, 0, 1 0, 3, 3, 1, 3, 1, 0, 1, 0 0, 3, 0, 1, 3, 1, 0, 1, 0 0, 2, 0, 1, 2, 1, 0, 1, 0 1, 2, 1, 0, 0, 2, 1, 0, 1 1, 0, 1, 2, 0, 1, 2, 0, 2 1, 2, 0, 1, 0, 2, 3, 1, 3 1, 0, 1, 3, 0, 1, 3, 0, 3 1, 3, 1, 0, 3, 0, 1, 0, 1 1, 3, 1, 0, 1, 0, 3, 0, 3 0, 3, 3, 1, 1, 3, 0, 1, 0 0, 2, 2, 1, 1, 0, 2, 1, 2

## A.1.3. Example 1 - PSO

Number of unique solutions: 96 0, 2, 2, 3, 2, 3, 1, 1, 3 1, 0, 1, 3, 2, 1, 0, 0, 2 1, 2, 1, 0, 0, 1, 2, 0, 2 2, 1, 0, 1, 1, 3, 0, 1, 0 1, 2, 0, 3, 0, 1, 2, 2, 0 1, 0, 1, 2, 2, 0, 1, 0, 1 0, 1, 1, 2, 0, 3, 2, 1, 3 1, 2, 0, 3, 1, 2, 3, 3, 2 1, 2, 2, 3, 3, 0, 2, 2, 1 1, 2, 0, 1, 1, 2, 3, 1, 2 0, 1, 2, 1, 3, 1, 0, 1, 3 0, 3, 1, 2, 0, 1, 2, 2, 3 1, 0, 1, 3, 2, 1, 3, 0, 2 0, 1, 1, 3, 1, 0, 3, 1, 0 1, 0, 0, 3, 1, 3, 2, 2, 1 3, 1, 1, 2, 2, 1, 0, 0, 2 0, 3, 1, 0, 3, 0, 1, 0, 3 1, 0, 3, 2, 3, 2, 0, 0, 1 1, 0, 2, 1, 0, 2, 1, 0, 1 1, 2, 2, 3, 2, 1, 0, 0, 2 2, 1, 0, 1, 3, 1, 0, 1, 2 2, 1, 0, 1, 3, 0, 2, 1, 2 1, 2, 0, 2, 2, 0, 1, 2, 0 0, 1, 1, 3, 2, 1, 3, 1, 2 2, 0, 1, 2, 2, 0, 3, 0, 3 2, 1, 0, 2, 2, 0, 1, 1, 2 2, 3, 1, 2, 2, 0, 3, 1, 3 1, 3, 0, 1, 2, 0, 1, 1, 2 3, 2, 3, 0, 1, 0, 2, 0, 2 3, 1, 1, 2, 0, 1, 2, 2, 1 1, 2, 2, 0, 0, 3, 2, 0, 1 2, 3, 2, 1, 2, 0, 3, 1, 2 0, 3, 1, 3, 3, 2, 1, 3, 2 0, 1, 2, 0, 1, 3, 2, 1, 0

```
1, 0, 3, 0, 0, 2, 1, 0, 1
2, 0, 1, 0, 2, 1, 0, 0,
1, 2, 2, 1, 0, 2, 3, 2, 3
0, 1, 0, 2, 1, 2, 3, 1, 2
1, 0, 1, 2, 1, 3, 2, 0, 2
0, 1, 3, 1, 0, 3, 1, 1,
0, 2, 1, 3, 2, 0, 1, 1, 2
1, 3, 3, 0, 2, 0, 1, 0, 1
0, 2, 1, 2, 3, 2, 1, 2, 3
0, 1, 1, 2, 1, 3, 0, 2, 0
1, 3, 1, 2, 3, 1, 2, 0, 2
3, 2, 1, 0, 1, 3, 2, 0, 3
0, 1, 2, 1, 1, 0, 2, 1, 3
0, 2, 2, 3, 3, 2, 1, 1, 2
2, 1, 0, 1, 2, 0, 1, 1, 2
1, 0, 1, 3, 1, 2, 3, 0, 2
1, 2, 0, 2, 1, 3, 2, 2, 1
2, 3, 1, 2, 3, 2, 1, 2, 2
0, 1, 2, 0, 3, 2, 1, 1, 2
0, 2, 3, 1, 0, 2, 1, 1, 0
3, 2, 3, 0, 3, 2, 0, 1, 0
2, 1, 0, 1, 2, 1, 0, 1, 0
0, 1, 1, 0, 3, 2, 1, 1, 0
0, 3, 1, 0, 3, 1, 2, 0, 2
1, 2, 3, 2, 0, 1, 2, 2, 2
1, 2, 3, 2, 2, 1, 3, 1, 0
1, 2, 2, 3, 1, 0, 2, 2, 1
1, 2, 1, 2, 0, 1, 2, 1, 2
3, 1, 0, 2, 3, 1, 2, 0, 2
0, 2, 1, 2, 0, 3, 1, 2, 0
0, 1, 0, 2, 2, 3, 1, 1, 0
0, 1, 3, 1, 3, 0, 2, 1, 3
1, 2, 3, 0, 0, 1, 3, 1, 3
0, 1, 0, 2, 1, 2, 0, 1, 0
3, 1, 2, 1, 1, 0, 3, 2, 3
1, 0, 1, 2, 1, 2, 3, 0, 1
0, 3, 0, 1, 2, 0, 3, 1, 2
1, 2, 2, 0, 1, 0, 2, 0, 1
1, 2, 0, 3, 1, 0, 3, 3, 1
0, 3, 1, 3, 1, 0, 2, 3, 1
1, 0, 2, 0, 1, 2, 3, 0, 1
2, 3, 1, 0, 1, 3, 2, 0, 1
2, 3, 1, 2, 1, 2, 0, 0, 1
1, 0, 0, 2, 0, 2, 1, 2, 3
1, 2, 2, 0, 3, 2, 1, 0, 2
3, 1, 1, 0, 2, 1, 3, 0, 2
2, 1, 1, 2, 3, 1, 2, 3, 3
0, 1, 2, 3, 3, 0, 1, 1, 3
3, 0, 0, 1, 2, 3, 1, 1, 0
1, 0, 2, 1, 2, 3, 1, 0, 2
```

```
1, 2, 0, 2, 1, 3, 0, 2, 1
0, 2, 1, 2, 3, 2, 0, 2, 1
0, 1, 2, 1, 1, 2, 0, 1, 3
0, 1, 0, 2, 2, 1, 0, 1, 2
2, 3, 3, 0, 0, 1, 2, 1, 2
1, 0, 2, 0, 2, 1, 3, 0, 3
0, 1, 2, 1, 0, 3, 1, 1, 2
0, 1, 3, 0, 3, 2, 1, 1, 0
1, 0, 1, 2, 0, 1, 2, 0, 2
2, 1, 1, 0, 1, 3, 2, 0, 1
1, 0, 3, 1, 3, 2, 0, 0, 1
0, 2, 0, 1, 3, 2, 1, 1, 2
```

## A.1.4. Example 1 - GWO

```
Number of unique solutions: 41
1, 0, 1, 2, 0, 2, 1, 0, 1
1, 3, 0, 1, 0, 3, 2, 1, 2
0, 1, 0, 3, 1, 3, 0, 1, 0
1, 2, 2, 0, 0, 2, 1, 0, 1
0, 2, 2, 1, 0, 1, 2, 1, 2
0, 2, 1, 0, 2, 1, 3, 0, 3
0, 3, 1, 3, 1, 0, 2, 3, 2
0, 2, 2, 1, 2, 1, 0, 1, 0
1, 0, 1, 3, 1, 0, 3, 0, 3
1, 2, 2, 0, 1, 0, 2, 0, 2
1, 2, 1, 0, 0, 1, 2, 0, 2
0, 1, 0, 2, 0, 1, 2, 1, 2
1, 2, 0, 2, 0, 1, 3, 2, 3
0, 2, 2, 1, 1, 2, 0, 1, 0
0, 2, 1, 2, 0, 1, 3, 2, 3
1, 0, 1, 2, 1, 0, 2, 0, 2
1, 0, 1, 2, 2, 0, 1, 0, 1
1, 0, 1, 3, 3, 0, 1, 0, 1
0, 1, 0, 3, 1, 0, 3, 1, 3
0, 1, 0, 2, 2, 1, 0, 1, 0
0, 3, 1, 0, 1, 3, 2, 0, 2
0, 2, 0, 1, 1, 2, 0, 1, 0
0, 2, 0, 1, 0, 1, 2, 1, 2
1, 2, 1, 0, 1, 0, 2, 0, 2
0, 2, 1, 0, 1, 2, 3, 0, 3
1, 2, 2, 0, 2, 0, 1, 0, 1
1, 2, 2, 0, 0, 1, 2, 0, 2
1, 3, 0, 3, 0, 1, 2, 3, 2
1, 2, 0, 1, 2, 0, 3, 1, 3
1, 2, 0, 2, 1, 0, 3, 2, 3
1, 3, 0, 1, 3, 0, 2, 1, 2
0, 1, 0, 2, 1, 0, 2, 1, 2
0, 1, 0, 3, 3, 1, 0, 1, 0
```

- 0, 1, 0, 2, 1, 2, 0, 1, 0
- 1, 2, 1, 0, 2, 0, 1, 0, 1
- 0, 3, 3, 1, 3, 1, 0, 1, 0
- 0, 3, 0, 1, 3, 1, 0, 1, 0
- 1, 2, 1, 0, 0, 2, 1, 0, 1
- 1, 2, 0, 1, 0, 2, 3, 1, 3
- 0, 3, 3, 1, 1, 3, 0, 1, 0
- 0, 2, 2, 1, 1, 0, 2, 1, 2

## A.1.5. Example 1 - ACO

Number of unique solutions: 3

- 2, 0, 2, 0, 1, 0, 2, 0, 2
- 2, 0, 2, 0, 1, 0, 2, 1, 2
- 2, 0, 2, 0, 1, 0, 2, 0, 0

## A.2. Attachments - Example 2

#### A.2.1. Example 2 - iSOMA

Number of unique solutions: 4

- 1, 2, 0, 2, 0, 1, 3
- 1, 2, 0, 2, 1, 0, 3
- 0, 2, 1, 2, 0, 1, 3
- 0, 2, 1, 2, 1, 0, 3

## A.2.2. Example 2 - DE

Number of unique solutions: 4

- 1, 2, 0, 2, 0, 1, 3
- 1, 2, 0, 2, 1, 0, 3
- 0, 2, 1, 2, 0, 1, 3
- 0, 2, 1, 2, 1, 0, 3

## A.2.3. Example 2 - PSO

Number of unique solutions: 84

- 2, 0, 3, 0, 0, 1, 3
- 1, 3, 0, 2, 1, 3, 2
- 1, 2, 0, 2, 3, 0, 1
- 3, 1, 0, 2, 1, 0, 2
- 0, 2, 1, 2, 0, 3, 2
- 1, 0, 0, 2, 3, 0, 1
- 1, 0, 2, 0, 0, 1, 2
- 2, 0, 0, 2, 0, 1, 2
- 2, 1, 0, 1, 1, 0, 2
- 0, 1, 1, 2, 3, 2, 0
- 0, 3, 2, 3, 2, 0, 3
- 2, 1, 1, 2, 1, 0, 2
- 1, 3, 3, 2, 0, 1, 2

1, 0, 3, 2, 0, 1, 2 1, 0, 0, 2, 3, 0, 2 2, 3, 0, 2, 2, 1, 3 0, 2, 0, 2, 0, 1, 3 3, 1, 2, 0, 1, 0, 3 0, 2, 3, 1, 1, 2, 3 0, 2, 1, 2, 0, 3, 1 1, 2, 2, 1, 0, 2, 3 1, 2, 0, 2, 1, 2, 0 1, 0, 0, 2, 2, 3, 0 1, 2, 3, 2, 2, 3, 1 1, 2, 3, 1, 0, 1, 3 0, 1, 1, 2, 1, 2, 0 0, 1, 1, 2, 0, 2, 1 3, 2, 1, 0, 0, 1, 2 2, 0, 0, 2, 1, 2, 3 2, 3, 3, 0, 2, 3, 0 1, 2, 0, 2, 3, 0, 2 1, 2, 0, 2, 0, 3, 1 0, 1, 1, 2, 2, 3, 0 0, 1, 1, 2, 1, 0, 2 0, 1, 1, 2, 2, 1, 0 3, 2, 3, 1, 0, 1, 3 3, 2, 0, 2, 2, 1, 3 1, 2, 0, 2, 3, 2, 0 1, 2, 1, 2, 1, 0, 3 0, 1, 1, 2, 1, 3, 2 2, 3, 1, 2, 0, 2, 3 0, 1, 1, 2, 2, 3, 1 1, 2, 0, 2, 0, 1, 2 2, 3, 1, 2, 2, 0, 3 1, 2, 0, 2, 1, 3, 2 1, 2, 0, 1, 1, 0, 2 0, 2, 1, 2, 2, 3, 1 1, 3, 3, 0, 0, 1, 2 1, 2, 1, 3, 1, 0, 2 1, 2, 3, 0, 0, 2, 3 0, 2, 1, 2, 3, 0, 2 0, 1, 1, 2, 3, 0, 2 1, 2, 0, 2, 0, 3, 2 2, 3, 1, 2, 1, 0, 2 0, 1, 1, 2, 3, 1, 2 1, 0, 2, 3, 0, 1, 2 0, 2, 1, 2, 3, 2, 1 0, 1, 1, 2, 3, 2, 1 2, 3, 0, 2, 1, 0, 2 3, 1, 1, 2, 1, 0, 2 3, 1, 0, 1, 1, 0, 2 1, 2, 0, 2, 2, 0, 1 1, 3, 1, 3, 1, 0, 3

- 1, 2, 3, 1, 2, 0, 3
  0, 2, 1, 2, 1, 2, 3
  0, 2, 2, 3, 3, 1, 2
  0, 1, 1, 2, 0, 3, 2
  1, 2, 3, 1, 1, 0, 3
  1, 3, 0, 2, 3, 1, 2
  1, 2, 0, 2, 3, 1, 2
  1, 2, 0, 2, 3, 1, 2
  1, 2, 0, 2, 0, 2, 1
  1, 2, 0, 2, 2, 3, 1
  1, 0, 0, 2, 2, 0, 1
  1, 0, 0, 2, 2, 0, 1
  1, 0, 0, 2, 0, 2, 1
  0, 2, 1, 2, 1, 2, 0
  2, 3, 0, 2, 1, 0, 3
  1, 0, 0, 2, 0, 3, 1
- 2, 3, 0, 2, 1, 0, 3 1, 0, 0, 2, 0, 3, 1 1, 0, 0, 2, 3, 2, 1 1, 2, 0, 2, 1, 0, 3 0, 2, 1, 0, 0, 1, 2 0, 2, 1, 2, 2, 3, 0 0, 3, 3, 1, 0, 1, 2

# A.2.4. Example 2 - GWO

Number of unique solutions: 7

0, 2, 1, 2, 3, 1, 2

2, 1, 2, 0, 1, 0, 3

1, 2, 0, 2, 0, 1, 3

1, 2, 0, 2, 1, 0, 3

1, 0, 0, 2, 1, 3, 2

0, 2, 1, 2, 1, 0, 3 0, 2, 1, 2, 0, 1, 3

1, 0, 0, 2, 0, 3, 1

## A.2.5. Example 2 - ACO

Number of unique solutions: 1 0, 1, 1, 0, 0, 2, 1

## A.3. Attachments - Example 3

## A.3.1. Example 3 - iSOMA

Number of unique solutions: 4 1, 4, 0, 4, 0, 1, 5 0, 4, 1, 4, 0, 1, 5

1, 4, 0, 4, 1, 0, 5

0, 4, 1, 4, 1, 0, 5

#### A.3.2. Example 3 - DE

Number of unique solutions: 4

```
1, 4, 0, 4, 0, 1, 5
0, 4, 1, 4, 0, 1, 5
1, 4, 0, 4, 1, 0, 5
0, 4, 1, 4, 1, 0, 5
```

# A.3.3. Example 3 - PSO

```
Number of unique solutions: 99
2, 3, 1, 2, 0, 2, 5
2, 3, 5, 4, 1, 3, 5
0, 4, 1, 2, 2, 1, 4
4, 1, 4, 2, 3, 2, 5
0, 4, 1, 4, 2, 1, 5
1, 4, 4, 1, 3, 1, 5
1, 4, 5, 4, 0, 1, 5
4, 5, 4, 3, 1, 0, 5
0, 4, 1, 4, 3, 0, 1
4, 2, 4, 0, 0, 2, 5
3, 5, 5, 2, 3, 1, 5
0, 3, 1, 4, 0, 1, 4
1, 2, 0, 2, 1, 2, 4
0, 3, 3, 2, 1, 0, 5
1, 4, 0, 4, 1, 2, 4
1, 4, 0, 4, 4, 3, 2
0, 2, 2, 4, 0, 1, 5
0, 3, 3, 1, 4, 1, 2
0, 2, 1, 0, 0, 1, 4
1, 0, 0, 4, 2, 3, 1
3, 4, 3, 0, 2, 4, 3
1, 0, 1, 2, 0, 2, 4
3, 2, 0, 5, 5, 4, 2
1, 4, 3, 2, 3, 2, 1
0, 4, 1, 4, 1, 3, 2
3, 1, 1, 4, 3, 0, 4
0, 2, 2, 3, 2, 1, 5
4, 2, 2, 3, 0, 1, 5
1, 4, 2, 4, 4, 0, 5
4, 5, 0, 2, 3, 5, 1
1, 2, 5, 4, 5, 2, 3
4, 2, 3, 0, 2, 4, 1
4, 5, 5, 1, 0, 2, 4
1, 4, 0, 5, 5, 1, 4
1, 0, 0, 4, 0, 1, 2
1, 3, 3, 5, 4, 0, 5
2, 1, 2, 4, 4, 5, 2
5, 2, 1, 4, 1, 0, 4
3, 1, 4, 2, 5, 3, 2
2, 5, 1, 2, 2, 5, 3
1, 3, 3, 1, 3, 0, 5
```

4, 2, 2, 1, 1, 3, 5

5, 2, 4, 3, 1, 0, 5 5, 2, 4, 1, 0, 3, 1 1, 5, 2, 3, 5, 0, 1 0, 2, 2, 1, 2, 1, 4 4, 2, 1, 2, 1, 0, 5 5, 3, 3, 1, 1, 0, 5 1, 2, 2, 4, 2, 0, 5 1, 0, 0, 4, 1, 2, 5 0, 2, 4, 5, 1, 2, 5 4, 1, 3, 2, 1, 4, 0 5, 4, 3, 5, 3, 2, 4 1, 4, 1, 2, 4, 0, 5 0, 1, 1, 4, 2, 5, 4 1, 0, 0, 4, 3, 1, 2 4, 2, 2, 3, 2, 4, 5 4, 2, 3, 4, 2, 5, 0 3, 4, 4, 5, 2, 1, 3 0, 2, 2, 1, 5, 4, 1 1, 5, 4, 3, 4, 5, 3 1, 0, 0, 4, 3, 5, 0 1, 2, 4, 2, 0, 1, 5 1, 2, 5, 2, 1, 0, 5 3, 2, 0, 1, 1, 0, 4 4, 1, 1, 2, 0, 1, 5 0, 1, 1, 0, 0, 1, 2 1, 4, 0, 2, 1, 2, 4 2, 0, 3, 0, 1, 2, 3 0, 1, 1, 4, 4, 0, 1 2, 4, 1, 3, 3, 1, 5 5, 1, 3, 2, 2, 1, 3 2, 5, 1, 4, 1, 0, 4 0, 3, 0, 2, 1, 3, 5 3, 4, 3, 2, 1, 5, 3 1, 3, 4, 3, 0, 1, 5 4, 3, 1, 3, 2, 3, 5 5, 1, 5, 3, 3, 1, 4 1, 0, 0, 4, 4, 3, 5 4, 2, 1, 2, 0, 2, 5 2, 5, 4, 1, 4, 5, 2 0, 4, 1, 4, 3, 2, 4 4, 3, 1, 4, 0, 1, 4 2, 3, 0, 4, 1, 4, 5 1, 4, 0, 4, 0, 5, 4 2, 1, 4, 0, 5, 3, 2 2, 5, 3, 2, 1, 0, 5 2, 4, 0, 2, 0, 1, 5 1, 0, 0, 4, 1, 4, 3 1, 4, 0, 4, 0, 1, 3 2, 5, 0, 2, 2, 1, 5 0, 5, 5, 4, 0, 1, 4

```
1, 4, 0, 4, 3, 0, 4
2, 5, 2, 1, 0, 1, 5
0, 3, 1, 3, 1, 3, 4
1, 2, 2, 5, 5, 2, 0
0, 2, 1, 0, 0, 2, 4
3, 4, 0, 4, 3, 4, 0
1, 2, 0, 2, 1, 5, 3
```

# A.3.4. Example 3 - GWO

```
Number of unique solutions: 35
0, 1, 1, 4, 0, 3, 5
0, 1, 1, 4, 0, 4, 1
0, 1, 1, 3, 3, 1, 4
0, 4, 1, 2, 2, 1, 4
0, 1, 1, 4, 0, 2, 5
0, 1, 1, 4, 2, 5, 1
0, 1, 1, 4, 1, 2, 0
0, 1, 1, 4, 1, 2, 5
0, 1, 1, 4, 1, 4, 2
1, 4, 0, 4, 0, 1, 5
0, 1, 1, 2, 2, 1, 4
0, 1, 1, 4, 2, 1, 3
3, 2, 3, 1, 1, 0, 5
0, 1, 1, 4, 1, 2, 3
0, 4, 1, 2, 1, 2, 4
1, 0, 0, 4, 1, 0, 3
1, 0, 0, 4, 2, 5, 1
0, 1, 1, 4, 1, 0, 3
1, 0, 0, 4, 2, 3, 0
0, 1, 1, 4, 4, 1, 3
0, 1, 1, 4, 2, 1, 5
1, 0, 0, 3, 0, 3, 4
1, 4, 0, 4, 1, 0, 5
1, 0, 0, 4, 1, 0, 2
0, 4, 1, 4, 1, 0, 5
2, 3, 5, 0, 0, 1, 5
0, 1, 1, 4, 2, 0, 4
0, 4, 1, 4, 0, 1, 5
1, 0, 0, 4, 3, 4, 1
1, 0, 0, 4, 2, 4, 3
1, 4, 0, 1, 1, 0, 4
1, 0, 0, 2, 0, 2, 4
5, 3, 3, 0, 1, 0, 5
1, 0, 0, 4, 2, 1, 0
1, 4, 0, 4, 3, 5, 4
```

## A.3.5. Example 3 - ACO

Number of unique solutions: 4

- 2, 1, 0, 2, 0, 4, 2 2, 1, 0, 2, 1, 3, 2
- 2, 1, 3, 2, 0, 4, 2 4, 1, 0, 2, 0, 4, 2