Integer Programs Report

Sequence-based Model   **312706019 陳昱萍**

```
N=10
objective: 1370.0
Runtime: 0.25397300720214844
```
```
N=12
objective: 1975.0
Runtime: 0.5069260597229004
```
```
N=14
objective: 2628.0
Runtime: 1.0679481029510498
```
```
N=16
objective: 3404.0
Runtime: 9.948219060897827
```
```
N=18
objective: 4303.0
Runtime: 102.81888508796692
```
```
N=20
objective: 5145.0
Runtime: 584.4066407680511
```
```
N=22
objective: 6115.0
Runtime: 3600.0428659915924
Gap: 0.019787408013082583
```

Position-based Model

```
N=10
objective: 1370.0
Runtime: 0.16763782501220703
```

```
N=12
objective: 1975.0
Runtime: 0.28492093086242676
```

```
N=14
objective: 2628.0
Runtime: 0.5017051696777344
```

```
N=16
objective: 3404.0
Runtime: 0.796302080154419
```

```
N=18
objective: 4303.0
Runtime: 1.373115062713623
```

```
N=20
objective: 5145.0
Runtime: 2.3405439853668213
```

```
N=22
objective: 6115.0
Runtime: 6.568305015563965
```

```
N=24
objective: 7310.0
Runtime: 13.752517938613892
```

```
N=26
objective: 8463.0
Runtime: 28.677090883255005
```

```
N=28
objective: 9574.0
Runtime: 111.07960987091064
```

```
N=30
objective: 10822.0
Runtime: 172.92234706878662
Gap: 9.240436148586214e-05
```

```
N=32
objective: 12114.0
Runtime: 348.5879511833191
Gap: 8.254911672445105e-05
```

```
N=34
objective: 13511.0
Runtime: 429.1218020915985
Gap: 7.401376656058027e-05
```

```
N=36
```

```
objective: 15043.0
Runtime: 483.8822422027588
Gap: 6.647610184138802e-05
```

N=38
objective: 16486.0
Runtime: 3600.0399849414825
Gap: 0.0088559902947956

Time-indexed Model

```
N=10
objective: 1158.0
Runtime: 0.5324318408966064
```

```
N=12
objective: 1670.0
Runtime: 0.7610559463500977
```

```
N=14
objective: 2223.0
Runtime: 2.089698076248169
```

```
N=16
objective: 2850.0
Runtime: 1.6180551052093506
```

```
N=18
objective: 3595.0
Runtime: 1.1525731086730957
```

```
N=20
objective: 4386.0
Runtime: 1.133065938949585
```

```
N=22
objective: 5226.0
Runtime: 1.577793836593628
```

```
N=24
objective: 6144.0
Runtime: 1.7533130645751953
```

```
N=26
objective: 7135.0
Runtime: 1.423557996749878
```

```
N=28
objective: 8123.0
Runtime: 1.297227144241333
```

```
N=30
objective: 9158.0
Runtime: 1.5081369876861572
```

```
N=32
objective: 10226.0
Runtime: 1.2346978187561035
```

```
N=34
objective: 11388.0
Runtime: 1.7688798904418945
```

```
N=36
objective: 12621.0
Runtime: 1.857923984527588
```

```
N=38
objective: 13863.0
Runtime: 2.2004470825195312
```

```
N=40
objective: 15196.0
Runtime: 1.6663930416107178
```

```
N=42
objective: 16604.0
Runtime: 1.4927730560302734
```

```
N=44
objective: 18020.0
Runtime: 2.32007098197937
```

```
N=46
objective: 19528.0
Runtime: 1.752676010131836
```

```
N=48
objective: 21191.0
Runtime: 1.9836091995239258
```

```
N=50
objective: 23002.0
Runtime: 1.8509521484375
```