SimPy Simplified

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- Resources

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`simulate(until=`*`endtime`*`)`

yield hold

```
100.0 Car2 Arrived
106.0 Car1 Arrived
Current time is  106.0
```

If, instead one chose to import SimPy.SimulateTrace at the start of the program one would obtain

```
gasstation = Resource(capacity=2, name='gasStation', unitName='pump')
```

Each Resource object, r, has the following additional attributes:

- r.n, the number of units that are currently free.

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4.3 Resource Example

In this complete script, the gasstation Resource object is given two resource units (capacity=2). Four

5.2   Putting amounts into a Level

An entity can o er an amount *give* to a Level, *lev*, by a `yield put` statement:

- `yield put, self,` *lev,give*

Here *give* must be a positive number (real or integer). If the amount o ered would lead to an overflow (that is,

record the total number of customers in the shop. In a discrete-event system the number of customers

```
0 request <Car2> <gasStation>  priority: default
...waitQ: []
...activeQ: ['Car2']
0 Car2 Got a pump
0 hold <Car2> delay: 100.0
3.0 Car3 Starting
3.0 request <Car3> <gasStation>  priority: default
...waitQ: []
...activeQ: ['Car2', 'Car3']
3.0 Car3 Got a pump
3.0 hold <Car3> delay: 100.0
3.0 Car4 Starting
3.0 request <Car4> <gasStation>  priority: default
...waitQ: ['Car4']
...activeQ: ['Car2', 'Car3']
4.0 Car1 Starting
4.0 request <Car1> <gasStation>  priority: default
...waitQ: ['Car4', 'Car1']
...activeQ: ['Car2', 'Car3']
100.0 reactivate <Car4> time: 100.0 prior: 1
100.0 release <Car2> <gasStation>
...waitQ: ['Car1']
...activeQ: ['Car3', 'Car4']
100.0 Car2 Leaving
100.0 <Car2> terminated
100.0 Car4 Got a pump
100.0 hold <Car4> delay: 100.0
103.0 reactivate <Car1> time: 103.0 prior: 1
103.0 release <Car3> <gasStation>
...waitQ: []
...activeQ: ['Car4', 'Car1']
103.0 Car3 Leaving
103.0 <Car3> terminated
103.0 Car1 Got a pump
103.0 hold <Car1> delay: 100.0
200.0 release <Car4> <gasStation>
...waitQ: []
...activeQ: ['Car1']
200.0 Car4 Leaving
200.0 <Car4> terminated
203.0 release <Car1> <gasStation>
...waitQ: []
...activeQ: []
203.0 Car1 Leaving
203.0 <Car1> terminated
Current time is  203.0
```