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```
classdef Scheduling_ClarkWrightVRP < SchedulingInterface
    %SCHEDULING_STRATEGY Summary of this class goes here
    %   Detailed explanation goes here

    properties
    end

    methods
        function Scheduling(self, TaskList)
```

1. Add Depot

```
depot = Task;
depot.Task_ID = 0;
depot.RequiredResourceState = [50, 50];
depot.CapacityRequirement= 0;
TaskList = [depot, TaskList];
nNodes = length(TaskList);
```

2. Make Cost Matrix & Capacity Array

```
%Build Cost Matrix: there are other ways to handle large instances but
costMat = zeros(nNodes, nNodes);
capacityReqts = zeros(nNodes,1);

for i = 1:nNodes
    capacityReqts(i) = TaskList(i).CapacityRequirement;
    for j = 1:nNodes
        costMat(i,j) = self.Controller.DELS.Facility.TravelDistance(Ta
    end
end
```

3. Call Clark Wright Savings

```
[loc, TC] = vrpsavings(costMat, {capacityReqts, 1000});
```

4. Assign ordered tasklists to resources

```
for j = 1:min(length(self.Controller.DELS.ResourceSet), length(loc))
    self.Controller.DELS.ResourceSet(j).TaskList = TaskList(loc{j});
```

```
                    self.Controller.DELS.ResourceSet(j).TaskListCapacityRequirement =
                end

            end
        end

    end
```

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