Splitter

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```
[]: import os
import Data_Manager
import json
```

This module contains the functions needed to split the data if separate data files are needed.

```
[]: directoryName = "Individual Simulation Data" # folder name

[]: def makeFolder():
    if os.path.exists(directoryName):
        pass
    else:
        try:
        os.mkdir(directoryName)
        except OSError:
        print("Creation of the directory failed")
        else:
            print("Successfully created the directory")
```

```
[]: def createPIR():
         makeFolder()
         data = Data_Manager.get_data()
         PIR = { # dummy data needed to make the file a template
             "PIR": {
                 "carsServiced": "nil",
                 "simulationTime": "nil",
                 "AWT": "nil"
             }
         }
         if os.path.exists('Individual Simulation Data/PIR_data.json'):
             with open('Individual Simulation Data/PIR_data.json', 'w') as f:
                 PIR['PIR']['carsServiced'] = data['PIR']['carsServiced']
                 PIR['PIR']['simulationTime'] = data['PIR']['simulationTime']
                 PIR['PIR']['AWT'] = data['PIR']['AWT']
                 json.dump(PIR, f, indent=5)
         else:
```

```
# the json file where the output must be stored
out_file = open("Individual Simulation Data/PIR_data.json", "w")
if os.path.exists('simulation_data.json'):
    PIR['PIR']['carsServiced'] = data['PIR']['carsServiced']
    PIR['PIR']['simulationTime'] = data['PIR']['simulationTime']
    PIR['PIR']['AWT'] = data['PIR']['AWT']
    json.dump(PIR, out_file, indent=5)
    print('File made')
    out_file.close()
else:
    json.dump(PIR, out_file, indent=5)
    print('File made')
    out_file.close()
```

```
[]: def createCamera():
         makeFolder()
         data = Data_Manager.get_data()
         Camera = { # dummy data needed to make the file a template
             "Camera": {
                 "carsServiced": "0".
                 "simulationTime": "0",
                 "AWT": "O"
             },
         }
         if os.path.exists('Individual Simulation Data/Camera_data.json'):
             with open('Individual Simulation Data/Camera data.json', 'w') as f: #1
      \rightarrowread
                 Camera['Camera']['carsServiced'] = data['Camera']['carsServiced']
                 Camera['Camera']['simulationTime'] = ___
      →data['Camera']['simulationTime']
                 Camera['Camera']['AWT'] = data['Camera']['AWT']
                 json.dump(Camera, f, indent=5)
         else:
             # the json file where the output must be stored
             out_file = open("Individual Simulation Data/Camera data.json", "w")
             if os.path.exists('simulation_data.json'):
                 Camera['Camera']['carsServiced'] = data['Camera']['carsServiced']
                 Camera['Camera']['simulationTime'] = __
      →data['Camera']['simulationTime']
                 Camera['Camera']['AWT'] = data['Camera']['AWT']
                 json.dump(Camera, out_file, indent=5)
                 print('File made')
                 out_file.close()
             else:
                 json.dump(Camera, out_file, indent=5)
                 print('File made')
```

```
[]: def createAntenna():
         makeFolder()
         data = Data_Manager.get_data()
         Antenna = { # dummy data needed to make the file a template
             "Antenna": {
                 "carsServiced": "0",
                 "EastToWest": "0",
                 "NorthToSouth": "0",
                 "AWT": "O"
             },
         }
         if os.path.exists('Individual Simulation Data/Antenna_data.json'):
             with open('Individual Simulation Data/Antenna_data.json', 'w') as f:
      \rightarrowread
                 Antenna['Antenna']['carsServiced'] = data['Antenna']['carsServiced']
                 Antenna['Antenna']['EastToWest'] = data['Antenna']['EastToWest']
                 Antenna['Antenna']['NorthToSouth'] = data['Antenna']['NorthToSouth']
                 Antenna['Antenna']['AWT'] = data['Antenna']['AWT']
                 json.dump(Antenna, f, indent=5)
         else:
             # the json file where the output must be stored
             out_file = open("Individual Simulation Data/Antenna data.json", "w")
             if os.path.exists('simulation_data.json'):
                 Antenna['Antenna']['carsServiced'] = data['Antenna']['carsServiced']
                 Antenna['Antenna']['EastToWest'] = data['Antenna']['EastToWest']
                 Antenna['Antenna']['NorthToSouth'] = data['Antenna']['NorthToSouth']
                 Antenna['Antenna']['AWT'] = data['Antenna']['AWT']
                 json.dump(Antenna, out file, indent=5)
                 print('File made')
                 out file.close()
             else:
                 json.dump(Antenna, out_file, indent=5)
                 print('File made')
                 out_file.close()
[]: def splitAll(): # splits all sims into a folder having each individual sim's
      \rightarrow data separate
         createPIR()
         createCamera()
         createAntenna()
[]: if __name__ == '__main__':
         splitAll()
```

out_file.close()