Scenario One Main Scenario Two ShiftController1 → shiftHistory ecommendedLineup : {monday : day ,{driverC : 1 , storeKepper : 1}} Active Employee TPController truck: {{12, BMV}} DeliveryDoc: {doc1} date: 01/01/21 locations: {Beer Sheva, Eilat} type: Night Regular worker1 ecommendedLineup : {...{monday day :driverC : 1 , storeKepper : 1}...} shiftHistory → {{<Courier,1>}{<Cashier,1>}} section: south Transportaion Manager Driver1 f\_Name: Nathan shift manager: 123456789 Employee Pool f\_Name:Arnon f\_Name:Shalom I\_Name: Stein I\_Name: Nehmad I\_Name:Shitrit TPController id: 123456789 truck: {{13, Audi}} id: 987654321 id: 123654789 Branch: Beer Sheva Giora DeliveryDoc: {doc1} personalConstraints: {{t,t,t,t,f,t,t},{t,t,f,t,t,f,f}} wage: 9500 jobList: StoreKeeper locations: {Beer Sheva, Eilat} monthlyDaysOff: 3 wage: 5000 shift manager: True Delivery monthlyDaysOff: 4 section: south monthlySickDays: 2 Human Resources Manager1 Transportaion Manager personalConstraints: {{t,t,t,t,t,f,f},{t,t,t,t,f,t}} ld: 55656567 f Name: Nathan monthlySickDays: 3 f\_Name:Shalom f Name:Kobi f Name:Arnon wage: 7000 I\_Name: Stein DepartureDate: 01/01/2021 I\_Name: Nehmad I\_Name:Cohen I\_Name:Shitrit license: C monthlyDaysOff: 1.5 id: 123456789 DepartureTime: 08:00 id: 987654321 id: 456987123 id: 123654789 monthlySickDays: 3 advanced study fund: 500 Branch: Beer Sheva Giora ArrivalTime: 10:30 personalConstraints: {{t,t,t,f,f,t,t},{t,t,f,t,t,f,f}} wage: 8500 wage: 9500 advanced study fund: 1500 DriverName: Null jobList: StoreKeeper monthlyDaysOff: 2.5 monthlyDaysOff: 3 wage: 5000 shift manager: True TruckLicenseNumber: Null Delivery monthlyDaysOff: 4 monthlySickDays: 2 personalConstraints: {{t,t,t,t,t,f,f},{t,t,t,t,f,t}} Source: Haifa ld: 55656567 license: C wage: 7000 Destination: Beer Sheva DepartureDate: 01/01/2021 monthlySickDays: 3 monthlyDaysOff: 1.5 Docs: {doc1} DepartureTime: 08:00 monthlySickDays: 3 TruckWeight: 13.5T advanced study fund: 500 ArrivalTime: 10:30 BankInfo BankInfo advanced study fund: 1500 DriverName: Arnon Nehmad bankld: 353 bankld: 506 TruckLicenseNumber: 4978312 Branch: Rosh Pina Branch: Tel-Aviv Source: Haifa Account Number: 7984561 Account Number: 2554365 Destination: Beer Sheva workersInAction advanced study fund: 7945614 Docs: {doc1} DeliveryDoc Truck TruckWeight: 13.5T ID: 001 LicenseNumber:4978312 BankInfo BankInfo dest : 901 Model : bmv bankld: 353 bankld: 506 supplies : {water,cheese,corn} NetWeight : 12.5T Branch: Rosh Pina Branch: Tel-Aviv MaxWeight : 15T Account Number: 2554365 Account Number: 7984561 advanced study fund: 7945614 Truck DeliveryDoc ID:001 LicenseNumber:4978312 dest : 901 Model : bmv supplies : {water,cheese,corn} NetWeight : 12.5T Supplies MaxWeight : 15T id: 001 Location id: 901 phone : 0501113154 Section contactName : itzik Supplies name : south Location id: 001 id: 901 name : corn phone : 0501113154 contactName : itzik Section

name : south
area : {{901,{Location}}}