

## System Activation Instructions

When the system is launched, you are presented with a menu of options. You first have to choose whether to activate the HR or the deliveries menu:

```
Welcome! Please choose which system you'd like to enter:
```

1. HR System
2. Deliveries System

Activating the Deliveries menu presents you with a list of pre-generated sites which can be used as origins and destinations of deliveries, as well as a list of options.

```
Welcome! Please choose which system you'd like to enter:
```

1. HR System
2. Deliveries System

```
2
```

```
Welcome to the delivery manager!
```

```
The following sites were auto generated and can be used for this demo:
```

- 0- Tel Aviv
- 1- Rishon Le Zion
- 2- Raanana
- 3- Haifa
- 4- Beer Sheva
- 5- Ashkelon
- 6- Ashdod
- 7- Eilat

```
In order to launch a delivery, you should first provide details.
```

```
A delivery consists of a list of delivery stops
```

```
Each delivery stop contains an origin, a destination and a list of items to deliver
```

```
Please enter the number of the option you would like to choose:
```

1. Add a delivery stop
2. Remove a delivery stop
3. Execute a delivery
4. Exit

```
Your choice: |
```

Important Note - in order to launch a delivery you must have a driver that is both licensed and enrolled on the shift. It requires a long combination of actions to add *everything* manually – therefore it is recommended to use the pre-generated data.

In order to launch a delivery you may use the pre-generated pending delivery stop pool, or you can add a 'delivery stop':

Your choice: 1

Here you can add a delivery stop to the pool of visits to be made

Would you like to add a delivery stop? (Y/N)

y

Please enter the origin details

Please enter the index (shown on top) of the site you would like to choose:

|

To add a 'delivery stop' you must choose an origin and a destination by choosing their index (0-9) from the list presented on the very top of the program.

The program will then ask you if the delivery to this site needs to be refrigerated, and then ask you to enter details regarding the items you wish to deliver:

Your choice: 1

Here you can add a delivery stop to the pool of visits to be made

Would you like to add a delivery stop? (Y/N)

y

Please enter the origin details

Please enter the index (shown on top) of the site you would like to choose:

4

Origin is set! Please enter the details about the destinations

Please enter the destination details

Please enter the index (shown on top) of the site you would like to choose:

6

do you need a regular(1) or a refrigerated(2) truck? (1/2)

2

Would you like to add an item to deliver to Site 6? (Y/N)

You can add items by typing their name, followed by their quantity.

When you finish adding items to this stop you can reply with 'N' (for no) and the program will ask if you wish to add more stops.

```

do you need a regular(1) or a refrigerated(2) truck? (1/2)
2
Would you like to add an item to deliver to Site G? (Y/N)
y
Please enter the item name:
eggs
Please enter the quantity:
120
Would you like to add an item to deliver to Site G? (Y/N)
y
Please enter the item name:
milk
Please enter the quantity:
500
Would you like to add an item to deliver to Site G? (Y/N)
n
Delivery added successfully. The delivery ID is 1
Would you like to add a delivery stop? (Y/N)

```

Hitting 'Y' will allow you to add more stops (with a possibly different origin and destination) and hitting 'N' will take you back to the main menu.

Option 2 in the main menu allows you to cancel a stop if you no longer wish to ship to this site.

To remove a stop enter its ID, which can be seen in the list below as 'ShipmentInstanceID=1'

```

Delivery added successfully. The delivery ID is 1
Would you like to add a delivery stop? (Y/N)
n

Please enter the number of the option you would like to choose:
1. Add a delivery stop
2. Remove a delivery stop
3. Execute a delivery
4. Exit
Your choice: 2
Note: This should only be used for stops that you added by mistake, it is not related to the overweight truck requirement
The following stops are available:
DeliveryStop{shipmentInstanceID=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}

Enter the ID of the stop you want to remove:

```

Adding a valid id will remove the stop, and an invalid will take you back to the main menu.

To launch a delivery you can choose option 3. The system will sort the deliveries and group together deliveries which have the same origin and the same shipment area (hidden from UI).

After sorting the deliveries into group it will ask you if you wish to execute – reply with the ID

## according to the FormID

```
Your choice: 2
Note: This should only be used for stops that you added by mistake, it is not related to the overweight truck requirement
The following stops are available:
DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}

Enter the ID of the stop you want to remove:
2
An error occurred- Index 2 out of bounds for length 1, please try again

Please enter the number of the option you would like to choose:
1. Add a delivery stop
2. Remove a delivery stop
3. Execute a delivery
4. Exit
Your choice: 3
{Zone 3=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refr
The following delivery forms were created:
DeliveryForm{formId=0, dispatchTime=2023-04-10 11:37:44.822, originSite=Site{name='Site E'}, destinationSitesToVisit=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 12
Enter the ID of the delivery form you want to execute:
0
```

After launching a delivery the truck will have its weight measured at the origin and at every stop. As the user you are responsible for simulating the weighing at this point.

```
Your choice: 3
{Zone 3=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}
The following delivery forms were created:
DeliveryForm{formId=0, dispatchTime=2023-04-10 11:37:44.822, originSite=Site{name='Site E'}, destinationSitesToVisit=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}
Enter the ID of the delivery form you want to execute:
0
What's the current weight of the truck?
60
Truck is overweight for delivery DeliveryForm{formId=0, dispatchTime=2023-04-10 11:37:44.822, originSite=Site{name='Site E'}, destinationSitesToVisit=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}
The truck is overloaded, and we couldn't arrange a larger truck.
These are the stops you have to visit:
Stop number 1: DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to destination- Site{name='Site G'}, truckTypeRequired- Refrigerated}
What would you like to do?
1. Remove stops
2. Cancel delivery
3. Reweigh truck
```

Enter the weight in tons. The system is simulated to have trucks capable of carrying up to 12 tons. If the truck is too heavy at this point the system will alert you. The system will look for another truck, and if it can't, you'd have to choose the way of action. You must then choose between 3 actions.

Choosing option 1 will ask you to choose a stop by ID as before and return that stop to the pool of stops to be executed.

```

Enter the ID of the delivery form you want to execute:
0
What's the current weight of the truck?
60
Truck is overweight for delivery DeliveryForm{formId=0, dispatchTime=2023-04-10 11:37:44.822, originSite=Site{name='Site E'}, d
The truck is overloaded, and we couldn't arrange a larger truck.
These are the stops you have to visit:
Stop number 1: DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to de
What would you like to do?
1. Remove stops
2. Cancel delivery
3. Reweigh truck
1
The truck is overloaded, and we couldn't arrange a larger truck. You have to remove some stops.
These are the stops you have to visit:
Stop number 1: DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, milk: 500}, from origin- Site{name='Site E'}, to de
Which stops would you like to remove?
1

```

Option 2 will return all the stops to the pool of stops to be executed, and option 3 will allow you to re-enter the weight.

After choosing option 1 or 2 you'll be returned to the main menu where you can re-launch that delivery.

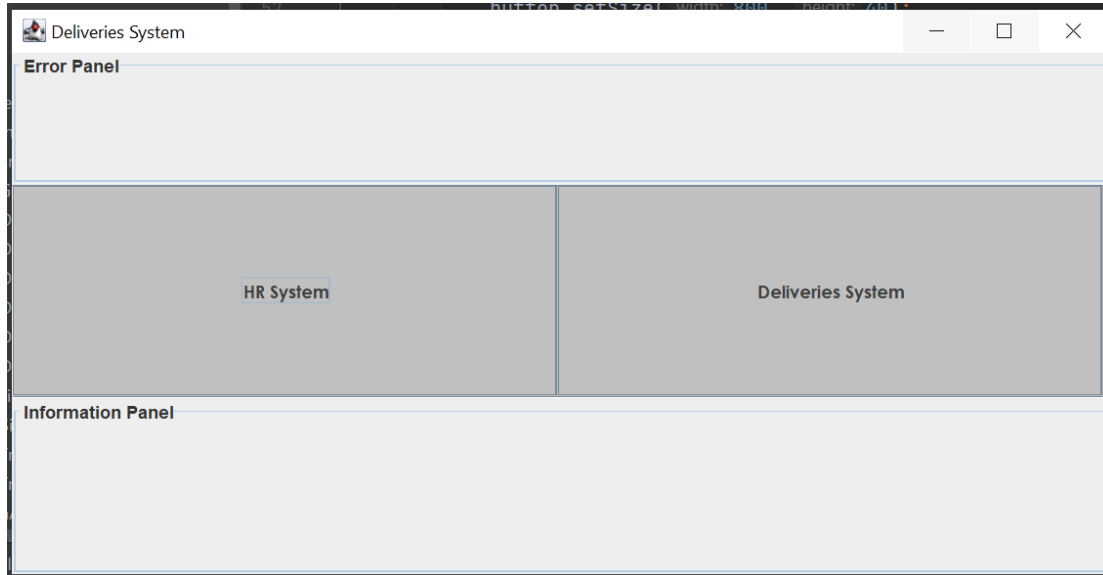
```

Please enter the number of the option you would like to choose:
1. Add a delivery stop
2. Remove a delivery stop
3. Execute a delivery
4. Exit
Your choice: 3
{Zone 3=[DeliveryStop{shipmentInstanceId=1, deliveryItems={eggs: 120, m
The following delivery forms were created:
DeliveryForm{formId=1, dispatchTime=2023-04-10 11:53:29.766, originSite
Enter the ID of the delivery form you want to execute:

```

## GUI Instructions

When the system is launched, you are presented with a menu of options. You first have to choose whether to activate the HR or the deliveries menu:



Activating the Deliveries menu presents you with a list of options:



Important Note - in order to launch a delivery you must have a driver that is both licensed and enrolled on the shift. It requires a long combination of actions to add *everything* manually – therefore it is recommended to use the pre-generated data.

In order to launch a delivery you may use the pre-generated pending delivery stop pool, or you can add a delivery stop by clicking "Add a delivery stop":

By clicking it, a list of sites is presented and you need to choose the origin of your delivery stop.

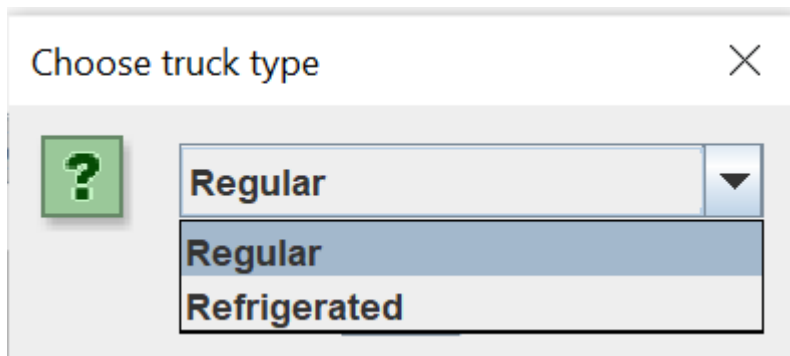
Return to main menu
Tel Aviv
Rishon Le Zion
Raanana
Haifa
Beer Sheva
Ashkelon
Ashdod
Eilat

after choosing your origin, another list of sites is presented and you need to tick the checkboxes of your delivery stop destinations.

Click 'Next' when done.

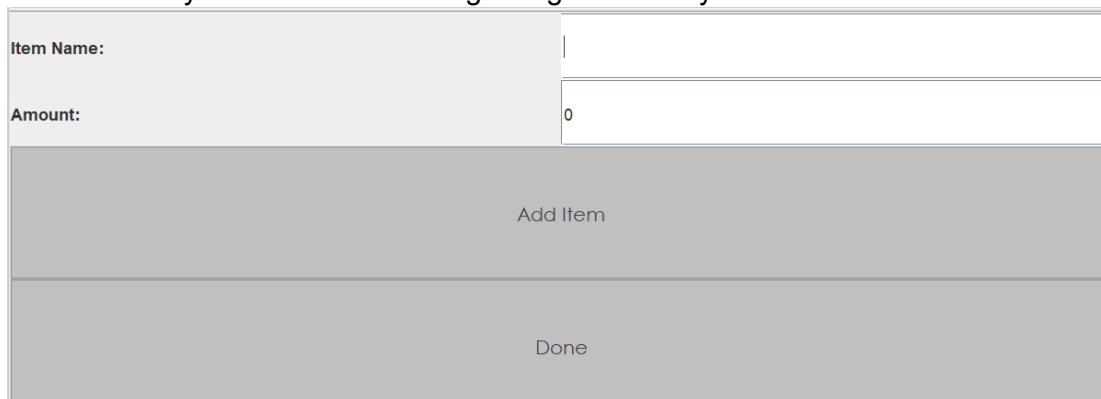
Return to main menu
<input type="checkbox"/> Tel Aviv
<input type="checkbox"/> Rishon Le Zion
<input type="checkbox"/> Raanana
<input type="checkbox"/> Haifa
<input type="checkbox"/> Beer Sheva
<input type="checkbox"/> Ashkelon
<input type="checkbox"/> Ashdod
<input type="checkbox"/> Eilat
Next

The program will then ask you if the delivery to this site needs to be refrigerated or a regular truck is enough:



A dialog box titled "Choose truck type" with a close button (X) in the top right corner. On the left is a green square button with a white question mark. To its right is a dropdown menu. The dropdown is open, showing two options: "Regular" (highlighted with a blue background) and "Refrigerated".

and then ask you to enter details regarding the items you wish to deliver:



A form for entering item details. It has two input fields: "Item Name:" and "Amount:". The "Amount:" field contains the number "0". Below the input fields are two large, light gray buttons: "Add Item" and "Done".

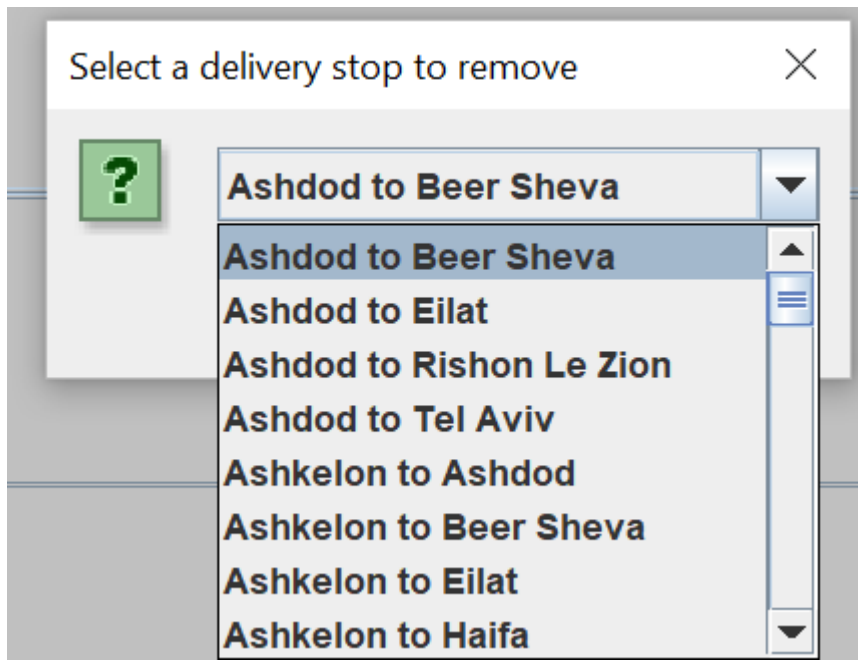
by clicking 'Add Item' you can add several items until no more items are needed and you can click 'Done'. (the delivery stop will be created and you'll go back to the main menu)



A menu with four large, light gray buttons arranged vertically: "Add a delivery stop", "Remove a delivery stop", "Execute a delivery", and "Exit".

By clicking 'Remove a delivery stop' you can choose a stop to delete:





Clicking 'ok' will remove it and 'cancel' will do nothing. Both options will return to the main menu.



h By clicking 'Execute a delivery' you will be presented with all the existing deliveries


Return to main menu
Form- ID: 0 from Beer Sheva to [Haifa]
Form- ID: 1 from Beer Sheva to [Raanaana, Tel Aviv, Rishon Le Zion]
Form- ID: 2 from Beer Sheva to [Ashkelon, Ashdod, Eilat]
Form- ID: 4 from Tel Aviv to [Rishon Le Zion, Raanaana]
Form- ID: 5 from Tel Aviv to [Ashkelon, Beer Sheva, Ashdod, Eilat]
Form- ID: 6 from Ashdod to []
Form- ID: 8 from Ashdod to [Beer Sheva, Eilat]
Form- ID: 13 from Eilat to [Tel Aviv, Rishon Le Zion, Raanaana]
Form- ID: 14 from Eilat to [Beer Sheva, Ashdod, Ashkelon]
Form- ID: 15 from Raanaana to [Haifa]
Form- ID: 17 from Raanaana to [Ashdod, Eilat, Beer Sheva]
Form- ID: 18 from Ashkelon to [Haifa]
Form- ID: 19 from Ashkelon to [Rishon Le Zion, Tel Aviv, Raanaana]

And by clicking one of them the next window will be presented:

Return to main menu
Start delivery

If 'Start delivery' is clicked – the system will ask for the weight before exiting:

Enter weight:



**The truck is leaving Tel Aviv and needs to be weighed, please enter weight.  
Hitting cancel will cancel the delivery form.**

OK
Cancel

Enter the weight in tons. The system is simulated to have trucks capable of carrying up to 12 tons. If the truck is too heavy at this point the system will alert you. The system will look for another truck, and if it can't, you'd have to choose the way of action. You must then choose between 3 actions:

The truck is overloaded, and we couldn't arrange a larger truck. You must choose how to proceed.

Return to main menu

Choose re-plan action: X

? REMOVE\_STOP

REMOVE\_STOP

CANCEL\_FORM

REWEIGH\_TRUCK

Choosing 'REMOVE\_STOP' will ask you to choose a stop by ID as before and return that stop to the pool of stops to be executed.

Choose stop to remove: X

? Beer Sheva

Beer Sheva

Eilat

Choosing 'CANCEL\_FORM' will return all the stops to the pool of stops to be executed, and 'REWEIGH\_TRUCK' will allow you to re-enter the weight.

Enter weight: X

? The truck is leaving Tel Aviv and needs to be weighed, please enter weight.  
Hitting cancel will cancel the delivery form.

OK Cancel

And of course, by clicking 'Exit' in the main menu, you will exit the program.

### Note:




You may also launch deliveries straight away by using the pre-generated data of delivery stops, sites and items to deliver.




Here's a brief example of some of the data that is in the DB:

	stop_id	origin_name	destination_name	truck_type	status	form_id
1	1	Tel Aviv	Beer Sheva	Refrigerated	NOT_STARTED	<null>
2	2	Rishon Le Zion	Ashdod	Refrigerated	NOT_STARTED	<null>
3	3	Ashkelon	Ashdod	Refrigerated	NOT_STARTED	<null>
4	4	Haifa	Tel Aviv	Refrigerated	NOT_STARTED	<null>
5	5	Rishon Le Zion	Beer Sheva	Refrigerated	NOT_STARTED	<null>
6	6	Haifa	Raanana	Refrigerated	NOT_STARTED	<null>
7	7	Rishon Le Zion	Ashdod	Refrigerated	NOT_STARTED	<null>
8	8	Raanana	Ashkelon	Refrigerated	NOT_STARTED	<null>
9	9	Haifa	Ashdod	Regular	NOT_STARTED	<null>
10	10	Raanana	Haifa	Refrigerated	NOT_STARTED	<null>
11	11	Ashdod	Eilat	Refrigerated	NOT_STARTED	<null>
12	12	Eilat	Tel Aviv	Refrigerated	NOT_STARTED	<null>
13	13	Eilat	Tel Aviv	Refrigerated	NOT_STARTED	<null>
14	14	Eilat	Tel Aviv	Refrigerated	NOT_STARTED	<null>
15	15	Tel Aviv	Raanana	Refrigerated	NOT_STARTED	<null>
16	16	Beer Sheva	Eilat	Regular	NOT_STARTED	<null>
17	17	Ashdod	Beer Sheva	Regular	NOT_STARTED	<null>
18	18	Tel Aviv	Eilat	Regular	NOT_STARTED	<null>
19	19	Eilat	Ashdod	Refrigerated	NOT_STARTED	<null>
20	20	Raanana	Tel Aviv	Refrigerated	NOT_STARTED	<null>

Note that at the beginning the form\_id is null since these delivery stops haven't yet been added to a form.

	name	address	contact_name	contact_phone	delivery_zone
1	Tel Aviv	Ben Gurion St 1	Peleg	054-1234560	2
2	Rishon Le Zion	Ben Gurion St 3	Tomer	054-1234561	2
3	Raanana	Ben Gurion St 5	Tamar	054-1234562	2
4	Haifa	Ben Gurion St 7	Gili	054-1234563	1
5	Beer Sheva	Ben Gurion St 9	Itay	054-1234564	3
6	Ashkelon	Ben Gurion St 11	Reut	054-1234565	3
7	Ashdod	Ben Gurion St 13	Lior	054-1234566	3
8	Eilat	Ben Gurion St 15	Noa	054-1234567	3

	 stop_id ▾	 item_name ▾	 quantity ▾
1	2	Crab	475
2	2	Chicken	415
3	2	Orange	43
4	2	Pork	133
5	2	Bread	290
6	3	Salmon	295
7	3	Butter	479
8	3	Fish	241
9	3	Pasta	429
10	3	Eggs	446
11	3	Bread	468
12	4	Potato	275
13	4	Watermelon	135
14	4	Fish	30
15	4	Rice	118
16	4	Milk	136
17	6	Zucchini	380
18	6	Apple	178
19	6	Lobster	498
20	6	Butter	92
21	6	Pasta	446
22	7	Pasta	459
23	7	Cheese	220
24	7	Orange	180
25	7	Shrimp	297
26	7	Pork	12
27	8	Tuna	37

	 driver_id	 driver_name	 phone
1	409114515	Nissim	555-555-0000
2	948942944	Tzipora	555-555-0001
3	628330706	Yuval	555-555-0002
4	653930326	Tali	555-555-0003
5	137952464	Limor	555-555-0004
6	34314587	Haim	555-555-0005
7	413046966	Hadas	555-555-0006
8	808531472	Eitan	555-555-0007
9	432501172	Sharon	555-555-0008
10	705102512	Yishai	555-555-0009
11	443075267	Nati	555-555-0010
12	829424566	Haim	555-555-0011
13	334682931	Yonit	555-555-0012
14	604807089	Shmuel	555-555-0013
15	58191690	Shay	555-555-0014
16	631925993	Yael	555-555-0015
17	689077658	Michal	555-555-0016
18	543065857	Tamar	555-555-0017
19	162407322	Eitan	555-555-0018
20	731404299	Nadav	555-555-0019
21	457848419	Lior	555-555-0020
22	904889043	Yitzhak	555-555-0021
23	135260931	Avital	555-555-0022
24	388524997	Liora	555-555-0023
25	400943745	Maayan	555-555-0024
26	384717435	Tova	555-555-0025
27	82565487	Nava	555-555-0026

	driver_id	weight_allowed_tons	regular_allowed	refrigerated_allowed
1	5880441	35	0	0
2	12531734	25	0	0
3	16027578	6	1	1
4	34314587	15	1	1
5	43462318	38	0	0
6	48051081	7	1	0
7	55800158	21	0	1
8	58191690	39	0	1
9	62955236	11	0	0
10	82565487	26	1	1
11	82611766	8	0	0
12	92193329	31	0	0
13	93621515	23	1	0
14	113230588	4	0	0
15	135260931	33	0	0
16	137952464	17	1	1
17	143258599	16	0	0
18	153535373	14	0	1
19	153885627	17	0	1
20	162407322	10	1	0
21	171430299	4	1	0
22	190277156	19	0	1
23	206713640	6	1	1
24	238195467	14	0	1
25	290153686	32	1	1

	license_plate	max_weight_tons	truck_type	model	net_weight_tons
1	JKL012	10	refrigerated	Daf	3
2	GHI789	8	refrigerated	Daf	2
3	DEF456	12	refrigerated	Scania	3
4	ABC123	12	refrigerated	Volvo	3
5	PQR678	12	refrigerated	MAN	3
6	EF6123	18	refrigerated	Daf	2
7	VWX234	20	regular	Volvo	2
8	FGH890	25	refrigerated	Iveco	3
9	WXY901	20	regular	Daf	2
10	QRS345	20	regular	Volvo	3
11	YZA567	18	regular	Iveco	2
12	KLM789	15	refrigerated	Volvo	2
13	FHD447	12	refrigerated	Daf	2
14	SDE156	12	refrigerated	Mercedes-Benz	2
15	PEL123	25	refrigerated	Volvo	2
16	MNO345	20	regular	MAN	2
17	G06100	15	regular	Mercedes-Benz	2
18	STU901	25	refrigerated	Iveco	2
19	DFE486	20	refrigerated	Mercedes-Benz	2
20	ZAB234	20	regular	Scania	3
21	BCD890	12	refrigerated	Volvo	2
22	HIJ456	12	refrigerated	MAN	2
23	CDE567	15	refrigerated	Mercedes-Benz	3
24	USA456	5	refrigerated	Dodge	2
25	BBQ456	4	regular	Chevrolet	2
26	UAE789	6	regular	Ford	3
27	WTF789	4	regular	Dodge	2