# Function Description

**Function Name**: int truckIndex findTruckForShipment(struct Map map, struct TruckDetail trucks [], int numTrucks, struct Shipment shipment)

**Parameter List**:

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| --- | --- | --- |
| Parameter Name | Type | Description |
| map | Struct Map | This parameter is the map to query with the position of all buildings in it. |
| trucks | Struct TruckDetail trucks[] {  int volumeLeft;  double weightLeft;  struct Route route;  }; | This parameter contains array of TruckDetail structs that contain variables that give information about the capacity and route of the truck, namely, weightleft, volumeleft and route. |
| numTrucks | int | This parameter is number of trucks in the trucks array. |
| shipment | struct Shipment | This parameter provides information about the size, weight, volume and destination of the shipment. |
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|  |  |  |

**Return: double**

**Description:**  Finds the best truck for a shipment. It considers both the load on the truck, the size and weight of the shipment, and the route of the truck to try to place it on a truck that goes closest to the destination. If there is no truck that can deliver the shipment, it returns – 1.