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Topic:
Chain of
Gas
Stations

I assume that
the chain of
gas stations is
solely in the
United States

Logic: 1 is
"payment uses
bank", whereas 0
is "payment does
not use bank"

Logic: 1 is "in
rewards
program",
whereas 0 is "not
in rewards
program".

Orange solid lines are
used to distinguish
the references
between Minimart
Order foreign keys
and the primary keys
of other tables.

Logic: including
dashes, a USA
phone number
has 14
characters.
XXX-XXX-XXXX

pump_number
refers to the
assigned pump
number. For
example, pump
one, pump two, etc.

In this
database, each
pump pumps
one type of gas

In this
database, each
supplier only
provides one
type of gas.

number_pumps
is the number of
pumps at one
gas station

Green solid lines are
used to distinguish
the references
between Gas Order
foreign keys and the
primary keys of other
tables.

Minimart Order		
PK	minimart_order_id	int
	order_time	datetime
	order_amount	numeric(10, 2)
FK	minimart_id	int
FK	payment_id	int
FK	customer_id	int
	procedure_completion_status	varchar(50)

Food		
PK	food_id	int
	food_name	varchar(50)
	food_price	decimal(10, 2)
	procedure_completion_status	varchar(50)

Beverage		
PK	beverage_id	int
	beverage_name	varchar(50)
	beverage_price	decimal(10, 2)
	procedure_completion_status	varchar(50)

Miscellaneous		
PK	miscellaneous_id	int
	miscellaneous_product_name	varchar(100)
	price	decimal(10, 2)
	procedure_completion_status	varchar(50)

Restaurant Menu		
PK	restaurant_menu_id	int
	item_name	varchar(50)
	price	decimal(10, 2)
	quantity_available	int
	procedure_completion_status	varchar(50)

Restaurant Information		
PK	restaurant_information_id	int
	name	varchar(50)
	phone_number	char(12)
FK	restaurant_menu_id	int
	procedure_completion_status	varchar(50)

Minimart		
PK	minimart_id	int
	minimart_name	varchar(100)
FK	gas_station_id	int
FK	food_id	int
FK	beverage_id	int
FK	miscellaneous_id	int
FK	restaurant_information_id	int
	procedure_completion_status	varchar(50)

Payment		
PK	payment_id	int
	payment_method	varchar(20)
	uses_bank	boolean
	procedure_completion_status	varchar(50)

Customer		
PK	customer_id	int
	first_name	varchar(100)
	last_name	varchar(100)
	rewards_program	boolean
FK	payment_id	int
FK	gas_station_id	int
	procedure_completion_status	varchar(50)

Employee		
PK	employee_id	int
	first_name	varchar(100)
	last_name	varchar(100)
	formatted_phone_number	char(12)
FK	gas_station_id	int
	procedure_completion_status	varchar(50)

Location		
PK	location_id	int
	region_name	varchar(20)
	state_name	varchar(50)
	state_abbreviation	char(2)
	city_name	varchar(100)
	address_name	varchar(100)
	procedure_completion_status	varchar(50)

Gas Station		
PK	gas_station_id	int
	gas_station_name	varchar(100)
FK	location_id	int
FK	number_pumps	int
FK	pump_id	int
	procedure_completion_status	varchar(50)

Pump		
PK	pump_id	int
	pump_number	int
FK	fuel_type_id	int
	procedure_completion_status	varchar(50)

Fuel Type		
PK	fuel_type_id	int
	fuel_type	varchar(100)
FK	supplier_id	int
	number_gallons	int
	procedure_completion_status	varchar(50)

Supplier		
PK	supplier_id	int
	supplier_name	varchar(100)
	formatted_phone_number	char(12)
	supplier_location	varchar(100)
	procedure_completion_status	varchar(50)

Supplier Representative		
PK	representative_id	int
FK	supplier_id	int
	first_name	varchar(100)
	last_name	varchar(100)
	formatted_cellphone_number	char(12)
	procedure_completion_status	varchar(50)

Gas Order		
PK	gas_order_id	int
	order_time	datetime
	order_amount	decimal(10, 2)
FK	customer_id	int
FK	pump_id	int
FK	payment_id	int
	procedure_completion_status	varchar(50)

Gas Supply Order		
PK	gas_supply_order_id	int
FK	gas_station_id	int
FK	supplier_id	int
	order_date	datetime
	arrival_date	datetime
	amount_paid	decimal(10, 2)
	gallons_received	decimal(10, 2)
	order_receipt_number	int
	procedure_completion_status	varchar(50)