user		
username	varchar(16) PK	
password	varchar(32) PK	
email .	varchar(255)	
last name	varchar(45)	
first name	varchar(45)	
phone	int	
vehicle plate number	varchar(20) FK	

 $User(\underline{\textit{username,password,vehicle}}, email, last\_name, first\_name, phone)$ 

1NF ok

2NF ok

3NF ok

4NF ok

vehicle	9
year	int
color	varchar(15)
vehicle_plate_number	varchar(20) PK
model	varchar(45) FK

Vehicle(<u>vehicle\_plate\_number,model,</u>year,color)

1NF ok

2NF ok

3NF ok

4NF ok

model	
make	varchar(45)
model	varchar(45) PK

Model(<u>model,</u> make)

1NF ok

2NF ok

#### 4NF ok

stud	lent
enrolled_year	int
graduation_year	int
user_username	varchar(16) FK
user_password	varchar(32) FK
is_live_campus	bool PK

# Student(<u>is\_live\_campus,user\_username,user\_password,</u> enrolled\_year,graduation\_year)

1NF ok

2NF ok

3NF ok

4NF ok

sta	aff	
is_Admin	int	PK
user_username	varchar(16)	FK
user_password	varchar(32)	FΚ

## Staff(is\_Admin,user\_username,user\_password)

1NF ok

2NF ok

3NF ok

4NF ok

cas	sh	
payment number	varchar(16) FK	
office collected	varchar(45) Pk	
cash collected	decimal(50,2)	

 ${\sf cash}(\underline{{\it office\_collected,payment\_number}}, {\it cash\_collected})$ 

1NF ok

3NF ok

4NF ok

# payment user\_username varchar(16) FK user\_password varchar(32) FK payment\_number varchar(25) PK

#### payment(payment\_number, user\_username,user\_password)

1NF ok

2NF ok

3NF ok

4NF ok

	city
city_name	varchar(45) PK

## city(city\_name)

1NF ok

2NF ok

3NF ok

credit_	card
payment_number card company	varchar(25) FK varchar(45) PK
billing_address	varchar(45)
zipcode city_name	int varchar(45) FK
state	varchar(45)

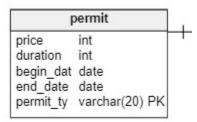
## $Credit\_card(\underline{\textbf{card\_company,payment\_number, cityname,}} \ billing\_address, zipcode, state)$

1NF ok

2NF ok

3NF ok

4NF ok



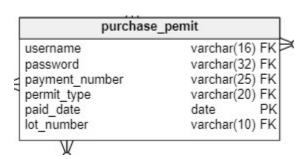
permit(permit\_type, price,duration, begin\_date,end\_date)

1NF ok

2NF ok

3NF ok

4NF ok



Purchase\_permit(paid\_date, username, password, payment\_number,permit\_type,lot\_number)

1NF ok

2NF ok

3NF ok

out	tdoor
lot_number	varchar(10) FK
street_name	varchar(45) PK
size_of_slot	int

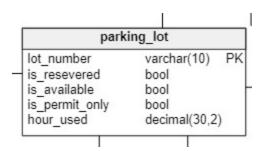
# outdoor(<u>street\_name, lot\_number,</u> size\_of\_slot)

1NF ok

2NF ok

3NF ok

4NF ok



Parking\_lot(<u>lot\_number</u>, is\_resevered, is\_available, is\_permit\_only, hour\_used)

1NF ok

2NF ok

3NF ok

indoor		
lot_number building	varchar(10) FK varchar(45) PK	
floor	int PK	
size_slot open hour	int time	
end_hour	time	

indoor(building, floor,lot\_number, size\_slot,open\_hour,end\_hour)

1NF ok

2NF ok

3NF ok

4NF ok

parking_price		
lot number	varchar(	10) FK
all day cost	int	
cost per hour	int	
hour limit	int	
is_holiday	bool	PK

indoor(is\_holiday, lot\_number, all\_day\_cost,cost\_per\_hour\_limit)

1NF ok

2NF ok

3NF ok

4NF ok

one_time_p	arking	
lot number	varchar(10) FK	
vehicle plate number	varchar(20) FK	
is paid	bool	
is_paid hour_parked	double(10,2) Pk	
net_cost	int	

One\_time\_parking(<u>hour\_parked</u>, <u>lot\_number</u>, vehicle\_<u>plate\_number</u>, is\_paid, hour\_parked, net\_cost)

1NF ok

2NF ok

3NF ok