

Course Number	CPS510
Course Title	Database Systems I
Semester/Year	F2020
Instructor	Dr. A. Abhari
TA Name	Haytham Qushtom

Assignment/Lab Report No.	7
Report Title	Normalization of the Database/ Functional Dependencies

Section No.	8	
Group No.	9	
Submission Date	November 10, 2020	
Due Date	November 10, 2020	

Student Name	Student ID	Initial
Tanvir Billah	500829695	T.B.
James Choi	500931983	J.C.
Mahamudul Islam	500963051	M.I.

Functional Dependencies(3NF):

```
Customer:
Customer\_id \rightarrow customer\_name, \ customer\_email,
Customer_email → customer_id, customer_name, customer_phone,
Customer_phone →customer_name, customer_address
Courier:
Courier_id → courier_web, courier_name, courier_phone
Courier_name → courier_id, courier_web, courier_phone
Seller:
Seller_id → seller_address, seller_phone, seller_name,
Seller_email → seller_id, seller_name, seller_phone
Seller\_name \rightarrow seller\_id, \ seller\_address, \ seller\_phone,
Product_category:
Category\_id \rightarrow category\_name
Brand:
Brand_id \rightarrow brand_name
Payment:
Payment_id → payment_date, amount, customer_id
Payment_type → payment_date
Cart:
Cart_id → cart_status, total_price, courier_id, payment_id, service_level, tracking_number
```

Product:

 $Product_id \rightarrow product_name, \ product_count, \ price, \ seller_id, \ brand_id, \ category_id$

Contains_product:

 $(product_id,\,cart_id) \to amount$