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

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|---------------------------|--|
| Assignment/Lab Report No. | 8  |
| Report Title              | Normalization of the Database/ Functional Dependencies |

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| Section No.     | 8                 |
| Group No.       | 9                 |
| Submission Date | November 17, 2020 |
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|                 |            |         |
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## Functional Dependencies(BCNF):

Customer:

Customer\_id  $\rightarrow$  customer\_name, customer\_email, customer\_phone, customer\_address

Customer\_email  $\rightarrow$  customer\_id, customer\_name, customer\_phone, customer\_address

Customer\_phone  $\rightarrow$  customer\_name, customer\_address, customer\_email, customer\_id

Courier:

Courier\_id  $\rightarrow$  courier\_web, courier\_name, courier\_phone

Courier\_phone  $\rightarrow$  courier\_id, courier\_web, courier\_name

Seller:

Seller\_id  $\rightarrow$  seller\_address, seller\_phone, seller\_name, seller\_email

Seller\_name  $\rightarrow$  seller\_id, seller\_address, seller\_phone, seller\_email

Seller\_email  $\rightarrow$  seller\_id, seller\_address, seller\_phone, seller\_name

Product\_category:

Category\_id  $\rightarrow$  category\_name

Brand:

Brand\_id  $\rightarrow$  brand\_name

Payment:

Payment\_id  $\rightarrow$  payment\_date, payment\_type, amount, customer\_id

Cart:

Cart\_id  $\rightarrow$  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)  $\rightarrow$  amount