

Homework 8

S1260027

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1.

(a)Candidate Keys

C:cno,cname

I:Ino,Iname

(b)Alternate Keys

C:cstatus

I:color,weight

(c)Foreign Keys

Cno,Ino

2.Functional Dependencies

$\{cno,cname\} \rightarrow \{cstatus\}$

$\{Ino,Iname\} \rightarrow \{color,weight\}$

3. difference between the following terms

(a) Candidate Keys and Primary Keys

subject

(b) Candidate Keys and Foreign Keys

Candidate Keys is minimal super key for the relation.

And foreign key in a table point to primary key in another table.

(c) Primary Key and Alternate Key

Primary key is one of keys chosen Candidate keys.

Alternate keys are other keys.

(d) NULL values and stored values

Null value is unknown or not exist.

There are substance in there.

4. Write the following

(a) Entity Integrity Rule

Primary Key of a Base relation cannot accept NULL.

(b) Referential Integrity Rule

RDB must not contain any unmatched Foreign Key.

(c) Attribute Integrity Rule

Each attributes must have values from its domain.

5. The following Database has 3 relations. Find

Bank-Branch Scheme = (Branch-Name, Total-Amount, Branch-City);

Customer Scheme = (Customer-Name, Street, Customer-City);

Deposit Scheme = (Branch-Name, Account-Number, Customer-Name, Balance)

(a) List of Candidate Keys for each relation;

Bank-Branch Scheme: {Branch-Name}

Customer Scheme: {Customer-Name}

Deposit Scheme: {Account-Number}

(b) List of Foreign Keys;

Bank-Branch Scheme: {Branch-Name}

Customer Scheme: {Customer-Name}

Deposit Scheme: {Branch-Name, Customer-Name}

(c) Attributes in different relations that have same domain

{Branch-Name, Customer-Name}