Employees dependency:

Key: active , ID

ID - > Employee\_contact, Job\_title

Job\_title -> wage\_type, wage

Nothing determines active.

BCNF:

{Job\_title,wage\_type, wage}

{ ID, Active, Employee\_contact, Job\_title}

Contact dependency:

Key: ID

ID -> Name, Address, City, State

Address, City, State -> zip

Name, Address -> email, phone

BCNF

{Address, City, State, zip}

{name,Address,email,phone}

{ID,Name,city,State}

This is would be worse than keeping them all together since we would have to update multiple tables when adding a contact.

Vendors Dependency:

Key: ID

ID -> Represntative\_contact

Representative\_contact -> company\_contact

Normalized

Customer dependency:

Key: Customer\_contact, promotions, ID

Normalized

Employee\_transactions dependency:

Key: Transaction\_ID

Transaction\_ID -> employee\_ID, Customer\_ID

Normalized

Transaction dependency:

Key: ID

ID -> sale\_amount, date\_sold, employee\_ID, music\_ISBN

Normalized

Music Transactions dependency:

Key: Transaction\_ID,Quantity

Transaction\_ID -> Music\_ISBN, Quantity

Normalized

Music dependency:

Key: ISBN, Type

ISBN -> producer, genre, year, vendor\_ID

Type -> price, quantity

Normalized

Artists dependency:

Key: Music\_ISBN

Music\_ISBN -> artist name

Normalized

Order dependency:

Key: ID,Status

ID -> Music\_ISBN, Date\_Ordered

Music\_ISBN -> Vendor\_ID

Normalized

Music\_Orders:

Key: Order\_ ID, quantity

Order\_ID -> Music\_ISBN

Normalized

Promotions dependency:

Key: ID

ID -> start\_date, End\_date, Music\_ISBN, Discount

Normalized