/*

Student ID: 30391113 Student Name: An Ju

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Normalisation

Class Staffing Report

UNF

CLASS (center_id, center_name, center_street, center_town, center_post, class_no, class_mins, facility_no, class_start, class_sessno, (staff_id, staff_fname, staff_lname, cstaff_leader, staff_faid))

1NF

CLASS (<u>center_id</u>, <u>class_no</u>, class_mins, facility_no, class_start, class_sessno) CLASS_STAFF (<u>center_id</u>, <u>class_no</u>, <u>staff_id</u>, staff_fname, staff_lname, cstaff_leader, staff_faid)

Partial Dependencies:

center_id -> center_name, center_street, center_town, center_post staff_id -> staff_fname, staff_lname, staff_faid

2NF

CLASS (<u>center_id</u>, <u>class_no</u>, class_mins, facility_no, class_start, class_sessno)
CENTER (<u>center_id</u>, center_name, center_street, center_town, center_post)
CLASS_STAFF (<u>center_id</u>, <u>class_no</u>, <u>staff_id</u>, cstaff_leader)
STAFF (<u>staff_id</u>, staff_fname, staff_lname, staff_faid)

Transitive Dependencies:

No transitive dependencies present.

3NF

CLASS (<u>center_id</u>, <u>class_no</u>, class_mins, facility_no, class_start, class_sessno)
CENTER (<u>center_id</u>, center_name, center_street, center_town, center_post)
CLASS_STAFF (<u>staff_id</u>, <u>center_id</u>, <u>class_no</u>, cstaff_leader)
STAFF (<u>staff_id</u>, staff_fname, staff_lname, staff_faid)

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Full dependencies:

```
center_id, class_no -> class_mins, facility_no, class_start, class_sessno center_id -> center_name, center_street, center_town, center_post center_id, class_no, staff_id -> cstaff_leader staff_id -> staff_fname, staff_laid
```

Class Attendance Report

UNF

CLASS (center_id, center_name, class_no, class_type, class_desc, facility_no, class_start, class_sessno, (member_id, payment_date, (sess_date), memberatd_total))

1NF

CLASS (<u>center_id</u>, <u>class_no</u>, center_name, class_type, class_desc, facility_no, class_start, class_sessno)

ATTENDANCE (<u>center id</u>, <u>class no</u>, <u>member id</u>, payment_date, memberatd total)

SESSION (center id, class no, member id, sess date)

Partial Dependencies:

center_id -> center_name

2NF

CLASS (<u>center_id</u>, <u>class_no</u>, class_type, class_desc, facility_no, class_start, class_sessno)

CENTER (<u>center_id</u>, center_name)

MEMBER_ATTENDANCE (<u>center_id</u>, <u>class_no</u>, <u>member_id</u>, payment_date, memberatd_total)

SESSION (center id, class no, member id, sess date)

Transitive Dependencies:

No Transitive dependencies present

/*

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3NF

CLASS (<u>center_id</u>, <u>class_no</u>, class_type, class_desc, facility_no, class_start, class_sessno)

CENTER (<u>center_id</u>, center_name)

MEMBER_ATTENDANCE (<u>center_id</u>, <u>class_no</u>, <u>member_id</u>, payment_date, memberatd_total)

SESSION (center id, class no, member id, sess date)

Full Dependencies:

center_id, class_no -> class_type, class_desc, facility_no, class_start, class_sessno

center_id -> center_name

center id, class no, member id -> payment date, memberatd total

COLLECTED 3NF RELATIONS:

- 1. CLASS (<u>center id</u>, <u>class_no</u>, class_mins, facility_no, class_start, class_sessno)
- 2. CENTER (<u>center_id</u>, center_name, center_street, center_town, center_post)
- 3. CLASS_STAFF (staff_id, center_id, class_no, cstaff_leader)
- 4. STAFF (staff id, staff fname, staff lname, staff faid)
- 5. CLASS (<u>center_id</u>, <u>class_no</u>, class_type, class_desc, facility_no, class_start, class_sessno)
- 6. CENTER (center id, center name)
- 7. MEMBER_ATTENDANCE (<u>center_id</u>, <u>class_no</u>, <u>member_id</u>, payment_date, memberatd_total)
- 8. SESSION (center id, class no, member id, sess date)

ATTRIBUTE SYNTHESIS:

1. & 5.

CLASS (<u>center_id</u>, <u>class_no</u>, class_mins, class_type, class_desc, facility_no, class_start, class_sessno)

2. & 6.

CENTER (<u>center_id</u>, center_name, center_street, center_town, center_post)

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3.
CLASS_STAFF (staff_id, center_id, class_no, cstaff_leader)
4.
STAFF (staff_id, staff_fname, staff_lname, staff_faid)
7.
MEMBER_ATTENDANCE (center_id, class_no, member_id, payment_date, memberatd_total)
8.
SESSION (center_id, class_no, member_id, sess_date)
```