題號： 430
科目： 計算機概論(B)
節次： 7

國立臺灣大學 107 學年度碩士班招生考試試題

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1. (20%) What is a Turing machine?

2. (20%) What is a genetic algorithm?

3. (20%) Please design an optimized logic circuit to transform a 4-bit Binary-Coded Decimal to Excess 3 code.

4. (20%) What is a GPU and how does it work?

5. (20%) Please transform the following table to comply with the second normal form:

```
CREATE TABLE CUSTOMERS(

    CUST_ID      INT                NOT NULL,

    CUST_NAME VARCHAR (20)          NOT NULL,

    ORDER_ID     INT                NOT NULL,

    ORDER_DETAIL VARCHAR (20)    NOT NULL,

    SALE_DATE    DATETIME,

    PRIMARY KEY (CUST_ID, ORDER_ID)

);
```

試題隨卷繳回