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| 实验报告 | | | | | | 次数 |  |
| 实验项目名称 | **分组排序查询及数据库索引** | | 姓名 | KAFLE SAMRAT | 日期：2021-05-29 |  | |
| 教师评语 |  | | | | | | |
| 实验成绩： | | 指导教师（签字）： 年 月 日 | | | | | |
| 一.实验目的与要求  （1）学会在对象资源管理器中对数据库表进行插入、修改和删除数据操作；  （2）学会使用T-SQL语句对数据库表进行插入、修改和删除数据操作；  （3）了解数据更新操作时要注意数据完整性。  二.实验内容  （一）分组排序查询  使用T-SQL语句，对向实验一中建立的数据库YGGL的三个表Employees、Department和Salary进行分组排序查询，完成实验4.1中的 “5.分组排序”的【思考与练习】中的相应查询内容（共5个查询），并给出查询结果。  注：若查询结果集行数超过7行时，使用TOP选项限制返回行数为7。  （二）数据库索引  使用T-SQL语句，对向实验一中建立的数据库YGGL的三个表Employees、Department和Salary三个表建立相关索引【界面方式不做】。然后对索引进行重建与删除。    三.实验内容和结果  Select the total number of DEPARTMENTS;    Select distinct departmentsid from Employee:    Select number of Employees from each department and sort by number from most to least;    Select from employee and distinguish male and female:    Select from Employee table and count the number of employee in the specific department in which departments contains more than one employee:    Select the information (Employeeid) from the salary whose averageincome is more than given amount:    Create a non-clustered index for table EMPLOYEE with index field EMPLOYEE.NAME and index name EMPLOYEE\_NAME.    Create a new table named TEMP and create a unique clustered index for this table with the index field temp\_number and the index name i\_temp\_number.    Use the system stored procedure sp\_helpindex to view the index information in the following syntax format:    Change the index EMPLOYEE\_NAME in table Employees to I\_S\_SEXANDAGE.    DROP INDEX I\_S\_SEXANDAGE FROM TABLE Employees: | | | | | | | |
| 实验总结及体会：  Through this Experiment I learn T-SQL statements how to use indexes in database and grouping sort query. When retrieving data using the ORDER BY and GROUP BY clauses, you can significantly reduce the grouping and sorting time in a query. | | | | | | | |