

创建客房类型表RoomType

列名称	数据类型	说明
<u>TypeID</u>	int	客房类型编号，主键，标识列从1开始，递增值为1
<u>TypeName</u>	varchar	客房类型名称
<u>TypePrice</u>	Decimal	客房价格，大于等于0

创建客房状态表RoomState

列名称	数据类型	说明
<u>RoomStateID</u>	Int	客房状态编号，主键，标识列从1开始，递增值为1
<u>RoomStateName</u>	Varchar	客房状态名称

创建客房信息表Room

列名称	数据类型	说明
<u>RoomID</u>	Int	房间号，主键，标识列从1开始，递增值为1
<u>BedNum</u>	Int	床位数，默认值为2
<u>GuestNum</u>	Int	入住客人数，默认值为0，必须大于等于0
<u>Description</u>	Varchar	客房描述，该栏必填
<u>RoomStateID</u>	Int	客房状态编号，外键
<u>RoomTypeID</u>	Int	客房类型编号，外键

列名称	数据类型	说明
<u>ResideID</u>	Int	结账状态编号，主键，标识列从1开始，递增值为1
<u>ResideName</u>	Varchar	结账状态名称，该栏必填

已知某宾馆数据库中，包含如下数据表。请使用存储过程完成下列需求，并正确给出存储过程的定义和测试方式

创建结账状态表ResideState

列名称	数据类型	说明
<u>ResideID</u>	Int	结账状态编号，主键，标识列从1开始，递增值为1
<u>ResideName</u>	Varchar	结账状态名称，该栏必填

创建客人信息表GuestRecord

列名称	数据类型	说明
<u>GuestID</u>	Int	客人入住流水号，主键，标识列从1开始，递增值为1
<u>GuestName</u>	Int	客人名称
<u>IdentityID</u>	Varchar	身份证号，字符个数必须等于18
<u>RoomID</u>	Int	房间号，外键
<u>ResideID</u>	Int	结账状态编号，外键，默认值为“未结账”编号
<u>ResideDate</u>	Datetime	入住日期
<u>LeaveDate</u>	Datetime	结账日期，必须大于等于入住日期
<u>Deposit</u>	Decimal	押金
<u>TotalMoney</u>	Decimal	总金额

练习1——统计某类型客房的入住客人人数

需求说明

使用存储过程统计在指定类型的客房入住客人的总人数

提示：

存储过程的输入参数是指定的客房类型名称

```
CREATE PROCEDURE usp_GetGuestNumByTypeName
    @typeName varchar(50),
    @result int OUTPUT
AS
    SELECT @result = count(1)
    FROM GuestRecord
    WHERE RoomID IN
        (SELECT roomID FROM Room WHERE RoomTypeID=
            (SELECTTypeID
            FROM RoomType WHERE TypeName = @typeName))

DECLARE @Count int
DECLARE @RoomType varchar(20)
SET @RoomType = '标准间'
EXEC usp_GetGuestNumByTypeName @RoomType,@Count OUTPUT
PRINT '入住酒店' + @RoomType + '的客人总人数是:' + CAST(@Count AS varchar(10))
```

练习2——根据房间号查询客房信息

需求说明

通过房间号查询客房的相关信息

如果房间号为-1表示查询所有客房信息

```
CREATE procedure usp_GetRoomInfo
```

```
    @roomID int
```

```
AS
```

```
    IF @roomID=-1
```

```
        SELECT
```

```
            a.RoomID, a.BedNum, a.RoomStateID, a.Description, a.GuestNum, a.RoomTypeID, b.TypeName, b.TypePrice,  
            RTRIM(c.RoomStateName) AS RoomStateName
```

```
        FROM Room a
```

```
        INNER JOIN RoomType b ON a.RoomTypeID = b.TypeID
```

```
        INNER JOIN RoomState c ON a.RoomStateID = c.RoomStateID
```

```
    ELSE
```

```
        SELECT
```

```
            a.RoomID, a.BedNum, a.RoomStateID, a.Description, a.GuestNum, a.RoomTypeID, b.TypeName, b.TypePrice,  
            RTRIM(c.RoomStateName) AS RoomStateName
```

```
        FROM Room a
```

```
        INNER JOIN RoomType b ON a.RoomTypeID = b.TypeID
```

```
        INNER JOIN RoomState c ON a.RoomStateID = c.RoomStateID
```

```
        WHERE roomID = @roomID
```

```
GO
```

```
EXEC usp_GetRoomInfo -1
```

练习3——删除某种客房类型居住记录

需求说明

根据客房类型删除客房类型记录

如果操作成功，返回删除的记录数；否则返回-1

```
CREATE PROCEDURE usp_deleteRoomTypeByld
```

```
    @typeName varchar(20)
```

```
AS
```

```
    DECLARE @typeID int
```

```
    SELECT @typeID=TypeID FROM RoomType WHERE TypeName = @typeName
```

```
    IF NOT EXISTS (SELECT * FROM Room WHERE RoomTypeID = @typeID)
```

```
    BEGIN
```

```
        DELETE FROM RoomType WHERE TypeID=@typeID
```

```
        return @@ROWCOUNT
```

```
    END
```

```
    ELSE
```

```
        return -1
```

```
GO
```

```
DECLARE @RoomTYPE varchar(20)
```

```
DECLARE @Result int
```

```
SET @RoomTYPE = '三人间'
```

```
EXEC @Result=usp_deleteRoomTypeByld @RoomTYPE
```

```
IF (@Result > 0)
```

```
    PRINT '删除酒店客房类型是'+ @RoomTYPE +'的记录' + CAST(@Result AS varchar(10)) + '条'
```

```
ELSE
```

```
    PRINT '删除酒店客房类型是'+ @RoomTYPE +'的记录，失败'
```

练习4——删除某种客房类型居住记录

需求说明

根据客房类型删除客房类型记录

如果操作成功，返回删除的记录数；否则返回-1

```
CREATE PROCEDURE usp_deleteRoomTypeByld
```

```
    @typeName varchar(20)
```

```
AS
```

```
    DECLARE @typeID int
```

```
    SELECT @typeID=TypeID FROM RoomType WHERE TypeName = @typeName
```

```
    IF NOT EXISTS (SELECT * FROM Room WHERE RoomTypeID = @typeID)
```

```
    BEGIN
```

```
        DELETE FROM RoomType WHERE TypeID=@typeID
```

```
        return @@ROWCOUNT
```

```
    END
```

```
    ELSE
```

```
        return -1
```

```
GO
```

```
DECLARE @RoomTYPE varchar(20)
```

```
DECLARE @Result int
```

```
SET @RoomTYPE = '三人间'
```

```
EXEC @Result=usp_deleteRoomTypeByld @RoomTYPE
```

```
IF (@Result > 0)
```

```
    PRINT '删除酒店客房类型是'+ @RoomTYPE +'的记录' + CAST(@Result AS varchar(10)) + '条'
```

```
ELSE
```

```
    PRINT '删除酒店客房类型是'+ @RoomTYPE +'的记录，失败'
```