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--第章准备学习用到的表和数据

--将以下语句拷贝到SQL manager，分部执行

## --创建数据库

```
create database schoolDB
go
use schoolDB
go
```

## --创建学生表

```
create TABLE TStudent (
    StudentID char(10) NOT NULL,
    Sname char(10) DEFAULT NULL,
    sex char(2) DEFAULT NULL,
    cardID char(20) DEFAULT NULL,
    Birthday datetime DEFAULT NULL,
    Email char(40) DEFAULT NULL,
    Class char(20) DEFAULT NULL,
    enterTime datetime DEFAULT NULL
)
go
```

## --创建函数该函数能够产生学生姓名

```

create function create_name (@s float)
RETURNS varchar(10)
begin
DECLARE @LN VARCHAR(300);
DECLARE @MN VARCHAR(200);
DECLARE @FN VARCHAR(200);
DECLARE @LN_N INT;
DECLARE @MN_N INT;
DECLARE @FN_N INT;

SET @LN='李王张刘陈杨黄赵周吴徐孙朱马胡郭林何高粱郑罗宋谢唐韩曹许邓萧冯曾程蔡彭潘
袁于董余苏叶吕魏蒋田杜丁沈姜范江傅钟卢汪戴崔任陆廖姚方金邱夏谭韦贾邹石熊孟秦阎薛侯
雷白龙段郝孔邵史毛常万顾赖武康贺严尹钱施牛洪龚';

SET @MN='伟刚勇春菊毅俊峰强军平保东文辉力明永健世广志瑗琰韵融园艺咏卿聪澜纯毓悦昭
冰爽琬茗羽希宁欣飘育滢馥新利筠柔竹霭凝晓欢霄枫芸菲寒伊亚宜可姬舒义兴良海山仁波宁贵
福生龙元全国胜学祥亮政谦亨奇固之岚苑富顺信子杰涛昌成康星光天达安岩中茂进林有坚和彪
博诚先敬震振壮会思群豪清飞彬娜静淑惠珠翠雅芝妍茜秋珊莎锦黛青倩婷姣婉娴瑾颖露瑶怡婵
雁蓓纨仪荷丹蓉眉君琴蕊薇菁梦素伟刚勇毅俊峰强军平保东文辉力明永健世广志义兴良海山仁
波宁贵福生龙元全国胜学祥才发武新利清飞彬富顺信子杰涛昌成康星光天达安岩中茂进林有坚
和彪博诚先敬震振壮会思群豪心邦承乐绍功松善厚庆磊民友裕河哲江超浩亮政谦亨奇固之轮翰
朗伯宏言若鸣朋斌梁栋维启克伦翔旭鹏泽晨辰士以建家致树炎德行时泰盛雄琛钧冠策腾楠榕风
航弘';

SET @FN='伟刚勇毅俊云莲真环雪荣爱妹霞香月莺媛艳瑞凡佳嘉琮勤珍贞莉桂娣叶璧才发武丽
琳轮翰朗伯宏言若鸣朋斌梁栋维启克伦翔旭鹏泽晨辰士以建家致树炎德河哲江超浩璐娅琦晶裕
华慧巧美婕馨影荔枝思心邦承乐绍功松善厚庆磊民友玉萍红娥玲芬芳燕彩兰凤洁梅秀娟英行时
泰盛雄琛钧冠策腾楠榕风航弘峰强军平保东文辉力明永健世广志义兴良海山仁波宁贵福生龙元
全国胜学祥才发武新利清飞彬富顺信子杰涛昌成康星光天达安岩中茂进林有坚和彪博诚先敬震
振壮会思群豪心邦承乐绍功松善厚庆磊民友裕河哲江超浩亮政谦亨奇固之轮翰朗伯宏言若鸣朋
斌梁栋维启克伦翔旭鹏泽晨辰士以建家致树炎德行时泰盛雄琛钧冠策腾楠榕风航弘';

SET @LN_N=len(@LN)*@s;
SET @MN_N=len(@MN)*@s;
SET @FN_N=len(@FN)*@s;

return
substring(@LN,@LN_N,1)+substring(@MN,@MN_N,1)+substring(@FN,@FN_N,1);
end
go

```

## --测试是否能产生新的姓名

```

select dbo.create_name(rand())

```

go

## --创建汉字转拼音的函数，用来产生用户的邮箱

```
create function dbo.fn_GetPinyin(@words nvarchar(2000))
returns varchar(8000)
as
begin
declare @word nchar(1)
declare @pinyin varchar(8000)
declare @i int
declare @words_len int
declare @unicode int
set @i = 1
set @words = ltrim(rtrim(@words))
set @words_len = len(@words)
while (@i <= @words_len) --循环取字符
begin
set @word = substring(@words, @i, 1)
set @unicode = unicode(@word)
set @pinyin = ISNULL(@pinyin +SPACE(0), '') +
(case when unicode(@word) between 19968 and 19968+20901 then
(select top 1 py from (
select 'a' as py, N'厶' as word
union all select 'ai', N'爰'
union all select 'an', N'黯'
union all select 'ang', N'醯'
union all select 'ao', N'熬'
union all select 'ba', N'櫛'
union all select 'bai', N'匱' --鞴頤頤
union all select 'ban', N'瓣'
union all select 'bang', N'鎊'
union all select 'bao', N'鏹'
union all select 'bei', N'璧'
union all select 'ben', N'輪'
union all select 'beng', N'鏹'
union all select 'bi', N'鼃'
union all select 'bian', N'變'
union all select 'biao', N'鰲'
union all select 'bie', N'鶯'
union all select 'bin', N'鬢'
union all select 'bing', N'霽'
union all select 'bo', N'蔔'
```

```
union all select 'bu',N'簿'
union all select 'ca',N'噉'
union all select 'cai',N'恣' --繚恣
union all select 'can',N'燦'
union all select 'cang',N'贍'
union all select 'cao',N'鏊'
union all select 'ce',N'箝'
union all select 'cen',N'岑'
union all select 'ceng',N'耄' --礪礪岵猓耄
union all select 'cha',N'詫'
union all select 'chai',N'囁'
union all select 'chan',N'顫'
union all select 'chang',N'輶'
union all select 'chao',N'舛'
union all select 'che',N'爇'
union all select 'chen',N'讖'
union all select 'cheng',N'秤'
union all select 'chi',N'鷺'
union all select 'chong',N'銃'
union all select 'chou',N'殍'
union all select 'chu',N'矗'
union all select 'chuai',N'踹'
union all select 'chuan',N'鵪'
union all select 'chuang',N'愴'
union all select 'chui',N'傾'
union all select 'chun',N'蠢'
union all select 'chuo',N'綫'
union all select 'ci',N'髡' --賜髡
union all select 'cong',N'認'
union all select 'cou',N'輶'
union all select 'cu',N'顫'
union all select 'cuan',N'爨'
union all select 'cui',N'睥'
union all select 'cun',N'村'
union all select 'cuo',N'錯'
union all select 'da',N'槌'
union all select 'dai',N'黷'
union all select 'dan',N'餐'
union all select 'dang',N'闔'
union all select 'dao',N'羶'
union all select 'de',N'的'
union all select 'den',N'鈍'
union all select 'deng',N'鐙'
union all select 'di',N'蟬'
```

```
union all select 'dia',N'嗲'
union all select 'dian',N'驀'
union all select 'diao',N'鐸'
union all select 'die',N'啞' --咍
union all select 'ding',N'顛'
union all select 'diu',N'鈺'
union all select 'dong',N'霽'
union all select 'dou',N'鬪'
union all select 'du',N'蠹'
union all select 'duan',N'舌' --齟舌
union all select 'dui',N'對'
union all select 'dun',N'踰'
union all select 'duo',N'鷓'
union all select 'e',N'鰓'
union all select 'en',N'摠'
union all select 'eng',N'鞞'
union all select 'er',N'械'
union all select 'fa',N'髮'
union all select 'fan',N'繁'
union all select 'fang',N'放'
union all select 'fei',N'贐'
union all select 'fen',N'鱗'
union all select 'feng',N'勑'
union all select 'fo',N'拂'
union all select 'fou',N'鴣'
union all select 'fu',N'猱' --鰕猱
union all select 'ga',N'尠'
union all select 'gai',N'璫'
union all select 'gan',N'瀨'
union all select 'gang',N'戇'
union all select 'gao',N'鎔'
union all select 'ge',N'獮'
union all select 'gei',N'給'
union all select 'gen',N'拒'
union all select 'geng',N'垸' --互垸踞噤咽
union all select 'gong',N'羶' --煩賴尠羶
union all select 'gou',N'購'
union all select 'gu',N'顧'
union all select 'gua',N'詿'
union all select 'guai',N'恠'
union all select 'guan',N'罐'
union all select 'guang',N'橫'
union all select 'gui',N'鯀'
union all select 'gun',N'贖'
```

```
union all select 'guo',N'腓'
union all select 'ha',N'哈'
union all select 'hai',N'饑'
union all select 'han',N'鶻'
union all select 'hang',N'沆'
union all select 'hao',N'尅'
union all select 'he',N'霤'
union all select 'hei',N'嬾'
union all select 'hen',N'恨'
union all select 'heng',N'堊' --堊堊
union all select 'hong',N'閔'
union all select 'hou',N'鬻'
union all select 'hu',N'馱'
union all select 'hua',N'薙'
union all select 'huai',N'瓊'
union all select 'huan',N'緩'
union all select 'huang',N'銕'
union all select 'hui',N'顛'
union all select 'hun',N'譚'
union all select 'huo',N'忤'
union all select 'ji',N'驥'
union all select 'jia',N'𨋖'
union all select 'jian',N'鑣'
union all select 'jiang',N'譽'
union all select 'jiao',N'醕'
union all select 'jie',N'解'
union all select 'jin',N'黥'
union all select 'jing',N'競'
union all select 'jiong',N'蕝'
union all select 'jiu',N'榷'
union all select 'ju',N'燿'
union all select 'juan',N'絹'
union all select 'jue',N'鑊'
union all select 'jun',N'攢'
union all select 'ka',N'鉞'
union all select 'kai',N'𡵓' --鉞𡵓
union all select 'kan',N'瞶'
union all select 'kang',N'閔'
union all select 'kao',N'鮒'
union all select 'ke',N'騾'
union all select 'ken',N'褱'
union all select 'keng',N'鏗' --𡵓𡵓𡵓𡵓
union all select 'kong',N'鹿'
union all select 'kou',N'𡵓'
```

```
union all select 'ku',N'譽'
union all select 'kua',N'誇'
union all select 'kuai',N'鯁'
union all select 'kuan',N'窾'
union all select 'kuang',N'鑛'
union all select 'kui',N'鑷'
union all select 'kun',N'睏'
union all select 'kuo',N'鵠'
union all select 'la',N'靸'
union all select 'lai',N'籟'
union all select 'lan',N'欄'
union all select 'lang',N'呤'
union all select 'lao',N'勞'
union all select 'le',N'餡'
union all select 'lei',N'脰' -- 嘮脰
union all select 'leng',N'陵'
union all select 'li',N'璦'
union all select 'lia',N'倆'
union all select 'lian',N'縶'
union all select 'liang',N'鋸'
union all select 'liao',N'瞭'
union all select 'lie',N'鱗'
union all select 'lin',N'轡' -- 轡鈴
union all select 'ling',N'伶'
union all select 'liu',N'咯' -- 𢉰𢉰𢉰咯
union all select 'long',N'隴'
union all select 'lou',N'鏤'
union all select 'lu',N'魯'
union all select 'lv',N'鑢'
union all select 'luan',N'亂'
union all select 'lue',N'撾'
union all select 'lun',N'論'
union all select 'luo',N'鑠'
union all select 'ma',N'嘛'
union all select 'mai',N'震'
union all select 'man',N'蓊'
union all select 'mang',N'蟒'
union all select 'mao',N'毳'
union all select 'me',N'瘻' -- 瘻咬
union all select 'mei',N'嚙'
union all select 'men',N'們'
union all select 'meng',N'蒙' -- 霧跽
union all select 'mi',N'冪'
union all select 'mian',N'麵'
```

```
union all select 'miao',N'廟'
union all select 'mie',N'鰓' --鰓𩺰
union all select 'min',N'繁'
union all select 'ming',N'詔'
union all select 'miu',N'謬'
union all select 'mo',N'糖' --糖𩺰
union all select 'mou',N'𦍋' --𦍋𦍋
union all select 'mu',N'旆'
union all select 'na',N'鮑'
union all select 'nai',N'銖'
union all select 'nan',N'孀'
union all select 'nang',N'𧢲'
union all select 'nao',N'𧢲'
union all select 'ne',N'呢'
union all select 'nei',N'燧' --嫩燧
union all select 'nen',N'嫩'
union all select 'neng',N'能' --𧢲𧢲𧢲𧢲𧢲𧢲
union all select 'ni',N'嫫'
union all select 'nian',N'𧢲'
union all select 'niang',N'釀'
union all select 'niao',N'豚'
union all select 'nie',N'𧢲'
union all select 'nin',N'𧢲'
union all select 'ning',N'𧢲'
union all select 'niu',N'𧢲'
union all select 'nong',N'𧢲'
union all select 'nou',N'𧢲'
union all select 'nu',N'𧢲'
union all select 'nv',N'𧢲'
union all select 'nue',N'𧢲'
union all select 'nuan',N'𧢲' --𧢲𧢲𧢲𧢲
union all select 'nuo',N'𧢲'
union all select 'o',N'𧢲' --𧢲𧢲𧢲𧢲
union all select 'ou',N'𧢲'
union all select 'pa',N'𧢲'
union all select 'pai',N'𧢲' --𧢲𧢲
union all select 'pan',N'𧢲'
union all select 'pang',N'𧢲'
union all select 'pao',N'𧢲'
union all select 'pei',N'𧢲'
union all select 'pen',N'𧢲'
union all select 'peng',N'𧢲' --𧢲𧢲𧢲𧢲
union all select 'pi',N'𧢲'
union all select 'pian',N'𧢲'
```



```
union all select 'piao',N'漂'
union all select 'pie',N'嫖'
union all select 'pin',N'聘'
union all select 'ping',N'蘋'
union all select 'po',N'魄'
union all select 'pou',N'罅' --罅罅
union all select 'pu',N'曝'
union all select 'qi',N'螫'
union all select 'qia',N'骼'
union all select 'qian',N'絳'
union all select 'qiang',N'砒' --羶羶
union all select 'qiao',N'趵'
union all select 'qie',N'箴'
union all select 'qin',N'蕮'
union all select 'qing',N'樓'
union all select 'qiong',N'璫'
union all select 'qiu',N'糗'
union all select 'qu',N'覷'
union all select 'quan',N'勸'
union all select 'que',N'確'
union all select 'qun',N'囀'
union all select 'ran',N'燃'
union all select 'rang',N'讓'
union all select 'rao',N'繞'
union all select 're',N'熱'
union all select 'ren',N'餛'
union all select 'reng',N'陝'
union all select 'ri',N'駟'
union all select 'rong',N'裕'
union all select 'rou',N'嶠'
union all select 'ru',N'揉'
union all select 'ruan',N'礪'
union all select 'rui',N'贅'
union all select 'run',N'櫛' --櫛掇
union all select 'ruo',N'鶻'
union all select 'sa',N'牲' --榛牲
union all select 'sai',N'籛' --籛籛
union all select 'san',N'閭'
union all select 'sang',N'喪'
union all select 'sao',N'臊'
union all select 'se',N'颺' --裊裊
union all select 'sen',N'簪'
union all select 'seng',N'綰' --閭綰
union all select 'sha',N'霎'
```

union all select 'shai',N'曬'  
union all select 'shan',N'鱔'  
union all select 'shang',N'綃'  
union all select 'shao',N'洸'  
union all select 'she',N'攝'  
union all select 'shen',N'疹'  
union all select 'sheng',N'賸'  
union all select 'shi',N'舄' --鯨鯢舄舄  
union all select 'shou',N'嗽'  
union all select 'shu',N'廬'  
union all select 'shua',N'說'  
union all select 'shuai',N'率'  
union all select 'shuan',N'膾'  
union all select 'shuang',N'滹'  
union all select 'shui',N'睡'  
union all select 'shun',N'髻'  
union all select 'shuo',N'鑠'  
union all select 'si',N'厖' --湯螭厖  
union all select 'song',N'鋤'  
union all select 'sou',N'瘡'  
union all select 'su',N'鷗'  
union all select 'suan',N'算'  
union all select 'sui',N'鏃'  
union all select 'sun',N'濫'  
union all select 'suo',N'蟀'  
union all select 'ta',N'樹' --蹢樹  
union all select 'tai',N'燭'  
union all select 'tan',N'賅'  
union all select 'tang',N'燙'  
union all select 'tao',N'畚' --討畚  
union all select 'te',N'螻'  
union all select 'teng',N'忒' --靈啉忒  
union all select 'ti',N'趯'  
union all select 'tian',N'檐'  
union all select 'tiao',N'糶'  
union all select 'tie',N'養'  
union all select 'ting',N'仞' --滌仞  
union all select 'tong',N'慙'  
union all select 'tou',N'透'  
union all select 'tu',N'鵠'  
union all select 'tuan',N'緣'  
union all select 'tui',N'駝'  
union all select 'tun',N'坵'  
union all select 'tuo',N'籜'

```
union all select 'wa',N'韃'
union all select 'wai',N'類'
union all select 'wan',N'購'
union all select 'wang',N'望'
union all select 'wei',N'衛'
union all select 'wen',N'璽'
union all select 'weng',N'鯢'
union all select 'wo',N'齧'
union all select 'wu',N'鵠'
union all select 'xi',N'盪'
union all select 'xia',N'鏹'
union all select 'xian',N'謙'
union all select 'xiang',N'鯨'
union all select 'xiao',N'敦'
union all select 'xie',N'蹊'
union all select 'xin',N'釁'
union all select 'xing',N'晷'
union all select 'xiong',N'兇'
union all select 'xiu',N'鯢'
union all select 'xu',N'蓓'
union all select 'xuan',N'贊'
union all select 'xue',N'濶'
union all select 'xun',N'鍾'
union all select 'ya',N'齧'
union all select 'yan',N'濫'
union all select 'yang',N'樣'
union all select 'yao',N'鑰'
union all select 'ye',N'兕' --鸛膺兕
union all select 'yi',N'齧'
union all select 'yin',N'穩'
union all select 'ying',N'鷹'
union all select 'yo',N'啣'
union all select 'yong',N'營'
union all select 'you',N'魷'
union all select 'yu',N'燐'
union all select 'yuan',N'願'
union all select 'yue',N'鵠'
union all select 'yun',N'韻'
union all select 'za',N'蠹'
union all select 'zai',N'綵'
union all select 'zan',N'饋'
union all select 'zang',N'臟'
union all select 'zao',N'竈'
union all select 'ze',N'稜'
```

```

union all select 'zei',N'齧'
union all select 'zen',N'贈'
union all select 'zeng',N'贈'
union all select 'zha',N'齧'
union all select 'zhai',N'齧'
union all select 'zhan',N'齧'
union all select 'zhang',N'障'
union all select 'zhao',N'絜'
union all select 'zhe',N'鷗'
union all select 'zhen',N'黠'
union all select 'zheng',N'證'
union all select 'zhi',N'豔'
union all select 'zhong',N'誦'
union all select 'zhou',N'驟'
union all select 'zhu',N'鑄'
union all select 'zhua',N'爪'
union all select 'zhuai',N'跬'
union all select 'zhuan',N'簋'
union all select 'zhuang',N'憇'
union all select 'zhui',N'鑄'
union all select 'zhun',N'稕'
union all select 'zhuo',N'籊'
union all select 'zi',N'漬' --漬嘔
union all select 'zong',N'縱'
union all select 'zou',N'娣'
union all select 'zu',N'誼'
union all select 'zuan',N'攢'
union all select 'zui',N'櫛'
union all select 'zun',N'鎔'
union all select 'zuo',N'叅') t
where word >= @word collate Chinese_PRC_CS_AS_KS_WS
order by word collate Chinese_PRC_CS_AS_KS_WS ASC) else @word end)
set @i = @i + 1
end
return @pinyin
END
go

```

## --执行以下命令查看函数效果

```

select dbo.fn_GetPinyin('韩立刚')
go

```

## --创建添加学生的存储过程

```
create procedure addStudent @num int
as
begin
declare @i int;
set @i=1;
delete TStudent;
while @num>=@i
begin
declare @sname varchar(40)
declare @sub int
set @sname=dbo.create_name(rand())
set @sub=rand()*4
insert TStudent
(StudentID,Sname,sex,cardID,Birthday,Email,Class,enterTime) values (
right(replicate('0',10)+ltrim(@i),10),
@sname,
case when(rand())>0.5) then '男' else '女' end,
convert(nvarchar(16),convert(bigint,rand()*10000000000000000)),
'198'+convert(char(1),convert(int,rand()*9)+1)+'-'+convert(char(2),convert(int,rand()*11+1))+'-'+convert(char(2),convert(int,rand()*27+1))
,
dbo.fn_GetPinyin(@sname)+'@91xueit.com',
case when(@sub<1) then '网络' when (@sub>=1 and @sub<2) then '测试' else
'开发' end,
getdate()
)
set @i=@i+1;
end
end
```

## --添加个学生

```
exec dbo.addStudent 2000
```

## --查看添加的学生

```
select * from dbo.TStudent  
go
```