SQL数据类型-DEMO

一、int(M)、tinyint(M)[需要设置填充零]

```
CREATE TABLE int_test (
    `id` INT ( 11 ) NOT NULL AUTO_INCREMENT,
    `state1` TINYINT ( 1 ) UNSIGNED ZEROFILL DEFAULT NULL,
    `state2` TINYINT ( 2 )  ,/*有符号数*/
    `state3` TINYINT ( 3 ) UNSIGNED ZEROFILL DEFAULT NULL,
    `state4` INT ( 1 ) UNSIGNED ZEROFILL DEFAULT NULL,
    `state5` INT ( 2 )  ,/*有符号数*/
    `state6` INT ( 3 ) UNSIGNED ZEROFILL DEFAULT NULL,
    PRIMARY KEY ( `id` )
) ENGINE = MyISAM  DEFAULT CHARSET = utf8;

insert into int_test (state1,state2,state3,state4,state5,state6)
values
(6,6,6,6,6,6),
(66,66,66,66,66,66),
(255,255,255,255,255,255),
(256,256,256,256,256,256);
```

- TINYINT(M)

```
select state1,state2,state3 from int_test;
```

state1	state2	state3
6	6	006
66	66	066
255	127	255
255	127	255

- INT(M)

```
select state4,state5,state6 from int_test;
```

state4	state5	state6
6	6	006
66	66	066
255	255	255
256	256	256

- INT(1)&TINYINT(3)

```
select state3,state4 from int_test;
```

state3	state4
006	6
066	66
255	255
255	256

二、decimal、float、double

```
create table decimal_test(
    float_col float,
    double_col double,
    dec1_col decimal(5,0),
    dec2_col decimal(5,2)
);

insert into decimal_test values
(0.999001,0.999001,1.5,1.5),
(0.9990001,0.9990001,2.4,2.4),
(0.9990011,0.9990011,9.9,9.9),
(0.9990015,0.9990015,1000,1000),
(100000,100000,100000,100000);
```

- FLOAT&DOUBLE

```
select float_col,double_col from decimal_test;
```

float_col	double_col
0.999001	0.999001
0.999	0.9990001
0.999001	0.9990011
0.999002	0.9990015
100000	100000

- DECIMAL(length, precision)

```
select dec1_col,dec2_col from decimal_test;
```

dec1_col	dec2_col
2	1.50
2	2.40
10	9.90
1000	999.99
99999	999.99

三、char、varchar、nvarchar、text

```
create table char_test(
    char_col CHAR(10),/*默认为1*/
    varchar_col varchar(10)/*必须注明位数*/
);
/*nvarchar_col nvarchar(5)(必须注明位数)*/

insert into char_test values
('string1','string1'),
(' string2',' string2'),
('string3 ','string3 ');
```

- CHAR&VARCHAR

```
select concat("'",char_col,"'"),concat("'",varchar_col,"'") from
char_test;
```

concat("'",char_col,"'")	concat("'",varchar_col,"'
'string1'	'string1'
' string2'	' string2'
'string3'	'string3 '

```
select * from char_test where char_col='string3' and
length(char_col)=length('string3');
```

char_col	varchar_col
string3	string3

```
select * from char_test where varchar_col='string3' and
length(varchar_col)=length('string3');
```

char_col	varchar_col
(N/A)	(N/A)

四、datetime、timestamp

```
create table time_test(
    datetime_col datetime,
    timestamp_col timestamp
);

insert into time_test values (null,null);
```

```
select * from time_test;
```

datetime_col	timestamp_col
(Null)	2023-03-12 12:42:33

五、enum、set

```
create table enum_test(
    e enum('fish','apple','dog')NOT NULL,
    s enum('fish','apple','dog')NOT NULL
);

insert into enum_test(e,s) values
('fish','fish'),
('dog','dog'),
('god','god'),
('lv','lv'),
('fish','fish');
```

```
select * from enum_test;
```

e	s
fish	fish
dog	dog
fish	fish

```
select e+1,s+1 from enum_test;
```

e+1	s+1
2	2
4	4
1	1
1	1
2	2

六、binary、varbinary、bit、blob

```
CREATE TABLE bin_test (
    `bin_col` binary(3),/*默认为1*/
    `varbin_col` varbinary(3),/*必须注明位数*/
    `bit_col` bit(3),/*默认为1*/
    `blob_col` blob
) ;

insert into bin_test (bin_col,varbin_col,bit_col,blob_col)values
(1212,1212,1,1),
(2121,2121,2,222222222222);
```

- binary&varbinary

```
1 select bin_col,varbin_col from bin_test;
```

bin_col	varbin_col
121	121
212	212

- bit(M)

```
1 select bit_col from bin_test;
```

bit_col
001
010

- blob

```
1 select blob_col from bin_test;
```

blob_col
(BLOB) 1 bytes
(BLOB) 12 bytes