

# 计算机科学与技术学院\_数据库系统\_课程实验报告

实验题目：综合实验 2		学号：202300130183														
日期：2024/12/10	班级：23 级人工智能	姓名：宋浩宇														
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<p>实验软件和硬件环境：</p> <p>实验软件：</p> <p>系统：Windows 11 家庭中文版 23H2 22631.4317</p> <p>编辑器：Visual Studio Code</p> <p>数据库：SQL Server 2022</p> <p>数据库管理工具：Microsoft SQL Server Management Studio 18</p> <p>硬件环境：</p> <p>CPU：13th Gen Intel(R) Core(TM) i9-13980HX 2.20 GHz</p> <p>内存：32.0 GB (31.6 GB 可用)</p> <p>磁盘驱动器：NVMe WD_BLACKSN850X2000GB</p>																
<p>实验步骤：</p> <p>第一题</p> <p>a)</p> <p>SQL：</p> <div><pre>SELECT     * FROM     VIDEO WHERE     VID = 35;</pre></div> <p>结果：</p> <table><thead><tr><th></th><th>vid</th><th>name</th><th>description</th><th>chanel</th><th>content</th><th>length</th></tr></thead><tbody><tr><td>1</td><td>35</td><td>namiolmpzu</td><td>fgdlwmqkts</td><td>电影</td><td>uwjexuvijk</td><td>3010</td></tr></tbody></table> <p>b)</p> <p>SQL：</p>				vid	name	description	chanel	content	length	1	35	namiolmpzu	fgdlwmqkts	电影	uwjexuvijk	3010
	vid	name	description	chanel	content	length										
1	35	namiolmpzu	fgdlwmqkts	电影	uwjexuvijk	3010										

```

SELECT
    [USER].*
FROM [USER]
JOIN POST ON [USER].UID = POST.UID
JOIN VIDEO ON POST.VID = VIDEO.VID
WHERE VIDEO.VID = 35;

```

结果:

	uid	nickname	gender	dateofbirth	idnum	profile	userlevel
1	69	jhhle	1	8920	2535861706	xckzolaqua	6

c)

SQL:

```

SELECT
    COUNT(*) AS "Number of Watching Videos"
FROM
    WATCH
WHERE
    WATCH.VID = 35;

```

结果:

	Number of Watching Videos
1	10

d)

SQL:

```

SELECT

```

```
COUNT(*) AS "Number of Liked Videos"
FROM
  [LIKE]
WHERE
  [LIKE].VID = 35;
```

结果:

	Number of Liked Videos
1	0

e)

SQL:

```
SELECT
  COUNT(*) AS "Number of Collect on Videos"
FROM
  [COLLECT]
WHERE
  [COLLECT].VID = 35;
```

结果:

	Number of Collect on Videos
1	2

f)

SQL:

```
SELECT
    COALESCE(SUM(COIN.AMOUNT),0) AS "Number of Coins the Videos"
FROM
    COIN
WHERE
    COIN.VID = 35;
```

结果:

	Number of Coins the Videos
1	0

g)

SQL:

```
SELECT
    *
FROM
    [COMMENT]
WHERE
    [COMMENT].VID = 35
ORDER BY VIDEO_TIME;
```

结果:

	uid	vid	post_time	video_time	content	color
1	99	35	567	285	elwrhcgaoLvffthxgqiinbrqclaowyj	40
2	27	35	968	705	nxsmabpacbmwfsobsibjkxnqtwynykomfcpg...	3
3	92	35	609	966	oyjvjvpppdulzmmemtkbohyttadwlialiqb...	136
4	73	35	966	1155	juikinezuykrq	8
5	73	35	974	1404	ovoziurmaxqq	189
6	73	35	959	1948	iqvtzekowqzbelrxzkinxuotirxhtbtgnuis...	52
7	24	35	992	2109	elrnjhfeuzlsdxcfcjnyodfvu	118
8	48	35	808	2134	srfluvyjspjkjjzhdagtbenxlhscyjvbcvzu...	233
9	6	35	724	2196	dcmhpoiylta	95
10	6	35	880	2411	ucwdjrfrnuftxklwesgiwouhtztpifuctqzgg...	71
11	48	35	475	2810	zqzpuqfnxvbjcqtsxrerjyitdjlzaomslzk...	120

第二题：

SQL：

```
SELECT
    *
FROM
    (
        SELECT
            [NICKNAME],
            COUNT(*) AS NUM
        FROM
            [USER]
        JOIN POST
        ON [USER].UID = POST.UID
        GROUP BY
            [USER].UID
    )
ORDER BY
    NUM DESC LIMIT 5;
```

结果：

	NICKNAME	NUM
1	jovjkdbfo	5
2	qtwhvekc	4
3	jrzkotrl	3
4	eiyaqqxw	3
5	kvxlhtsv	3

第三题：

SQL：

```
SELECT
    NICKNAME,
    PROFILE,
    [USERLEVEL],
    NUM
FROM
    (
        SELECT
            UID_FOLLOWED,
            COUNT(*) AS NUM
        FROM
            FOLLOW
        GROUP BY
            UID_FOLLOWED
    ),
    [USER]
WHERE
    UID_FOLLOWED = USER.UID
ORDER BY
    NUM DESC LIMIT 10;
```

结果：

	nickname	profile	userlevel	NUM
1	zhtxcvkk	dqvxblejla	0	28
2	blrqmzfmq	gumzbdlhwx	7	26
3	axddyxj	tucyyiwrwc	9	25
4	kqsfyvskb	fxdwejrxev	1	25
5	kjebx	wyqlirinkm	4	25
6	yfsypq	jujpcvozxx	4	25
7	izyrv	dmbtcxpvux	2	25
8	icxglwt	fsoptpunyv	7	25
9	thyftbzn	fjzlykyvzm	6	25
10	sjbrpfh	frdvnpxmdf	2	25

第四题：

SQL：

```

SELECT
    VIDEO.[NAME],
    VIDEO.CONTENT,
    T.NUM
FROM
    VIDEO,
    (
        SELECT
            VID,
            COUNT(*) AS NUM
        FROM
            WATCH
        GROUP BY
            VID
    ) AS T
WHERE
    VIDEO.VID = T.VID
ORDER BY
    T.NUM DESC LIMIT 10;

```

结果：

	name	content	NUM
1	tthcxlsqdy	gyhxmgitlz	18
2	rawlsnwcym	iwknusxcsk	17
3	bgktheendw	gzgpaokigu	16
4	stkunvohgi	qfyghnlpdk	16
5	jpbohfevdc	mshfzbxtzr	16
6	jhzaxhdjmx	sgczkaatwg	15
7	mtpplcobib	yewstmfrox	14
8	giijjdhbqd	grjnooopok	14
9	pjjwafqowp	ljdspfqufi	14
10	vsbzgxczdf	arvdrpzxfb	14

第五题：

SQL：

```
SELECT
    VIDEO.CHANEL,
    COUNT(*) AS [SUM]
FROM
    VIDEO
    JOIN WATCH
    ON VIDEO.VID = WATCH.VID
GROUP BY
    VIDEO.CHANEL;
```

结果：



	chanel	SUM
1	VLOG	118
2	动画	17
3	生活	66
4	电影	93
5	电视剧	96
6	知识	54
7	纪录片	53
8	综艺	65
9	美食	81
10	运动	115
11	音乐	137
12	高效	107

第六题：

SQL：

```
SELECT
    VIDEO.[NAME],
    VIDEO.CONTENT,
    T.NUM
FROM
    VIDEO,
    (
        SELECT
            VID,
            COUNT(*) AS NUM
        FROM
            WATCH
        GROUP BY
            VID
    ) AS T
WHERE
    VIDEO.VID = T.VID
    AND VIDEO.CHANEL = "美食"
```

```
ORDER BY  
T.NUM DESC LIMIT 5;
```

结果:

	name	content	NUM
1	stkunvohgi	qfyghnlpdk	16
2	fampzhdvnm	zeumtggvnx	12
3	zklnoloyuk	xrlmwivrao	12
4	pyoazvitgi	cbbhvrycez	12
5	hxhojatmef	voshbytgfk	10

第七题:

SQL:

```
SELECT  
    VIDEO.CHANEL,  
    COUNT(*) AS SUM  
FROM  
    VIDEO  
    JOIN WATCH  
    ON WATCH.VID = VIDEO.VID  
    JOIN [USER]  
    ON [USER].UID = WATCH.UID  
WHERE  
    [USER].UID = 15  
GROUP BY  
    CHANEL  
ORDER BY  
    SUM DESC LIMIT 5;
```

结果:

	chanel	SUM
1	音乐	2
2	美食	1
3	综艺	1
4	纪录片	1
5	电影	1

第八题：

SQL：

```
SELECT
    VIDEO.NAME,
    VIDEO.DESRIPTION
FROM
    VIDEO
    JOIN WATCH
    ON VIDEO.VID = WATCH.VID
WHERE
    WATCH.UID = 15
    AND WATCH.TIME > 900;
```

结果：

	name	description
1	bomdodcvkj	daumgykladb
2	bmmndibcs0	nurgjns1zb
3	hlumljfw1w	gxjhzfuxld
4	wswcwtzfks	xomfatteld

第九题：

SQL：

```
SELECT
```

```
[USER].NICKNAME,  
[USER].PROFILE,  
[USER].USERLEVEL  
FROM  
FOLLOW  
JOIN [USER]  
ON [USER].UID = FOLLOW.UID_FOLLOWER  
WHERE  
UID_FOLLOWED = 15;
```

结果:

	nickname	profile	userlevel
1	zceduuvo	jgnnwdohoz	7
2	vqysgb	asdijsvlqmg	6
3	kjebx	wyqlirinkm	4
4	qokgtnaq	dgkhmegzgo	0
5	fyyfnxziq	fhepffkdmp	0
6	yfsypq	jujpcvozsk	4
7	ooygnjkt	mneegpvyfz	9
8	lonxxrn	whvgpweoqn	4
9	heoaew	qzbyhuhiam	0
10	jxoyhyxi	qktdlxsoc	8
11	czqvvned	mvanwfdрте	3
12	iptfzi	mecclpnfnz	7
13	uutyty	ddvmaqvoki	9
14	xhvklhqq	lhomvepcad	1
15	nulnqcut	xzvfvcmyol	4
16	nbnndo	yadcteqbel	8
17	blrqmzfmq	gumzbdlhws	7
18	sqvxfwr	qzpuygernt	5
19	hmmwj	trduqheuuq	8
20	egwjpbkdf	fgzovbkvgm	1
21	iomug	hhgrwyfayd	0
22	yypmegxv	npsixxqesp	2
23	vdbhhxd	wtqbknaaqs	9

第十题：

SQL：

```
SELECT
    VIDEO.NAME,
    VIDEO.DESRIPTION,
    POST.POST_TIME
FROM
    VIDEO
    JOIN POST
    ON POST.VID = VIDEO.VID
    JOIN FOLLOW
    ON FOLLOW.UID_FOLLOWED = POST.UID
WHERE
    FOLLOW.UID_FOLLOWER = 15
ORDER BY
    POST.POST_TIME DESC;
```

结果：

	name	description	post_time
1	auauwwaaq	rsmbxynqcu	985
2	bmmndibcso	nurgjnslnzb	960
3	wswcwtzfk	xomfatteld	927
4	vsbzgxczdf	yamxzfngnh	834
5	gokxfchyix	ncabuddamg	826
6	hxhojatmef	lmqhadjjti	798
7	cfhnmsviqd	ttqlpjsrtk	674
8	cfhnmsviqd	ttqlpjsrtk	674
9	bomdodcvkj	daumgykldb	668
10	wmjelytqvh	qaevyjjzent	655
11	oeptkiacjw	hsssaqsabc	606
12	eueucjzoqn	havzlnmpdy	589
13	syijyuacdd	iqszruucxt	572
14	ouxhhemmtj	lirmhhdnye	528
15	tpqkahonee	rjmstwxeub	412
16	bdsenjnchd	dycoepxauk	400
17	rltujnqjxr	tjleqkcfaq	393
18	fampzhdvnm	knrrfxgrey	384
19	yglxyrfpjb	zekzmksbsx	327
20	txbnxuqmae	cyfandktrr	299
21	akjdalybry	lsbtxpstkk	145
22	opckirgfah	wjmbakaqkm	89
23	fajlggoeux	ndehpfutwd	77
24	cftitpaofv	gplvvyducd	37
25	stkunvohgi	nyityillwp	29
26	ygtnmjiyuh	uoxiahofte	6

第十一题：

SQL：

```
SELECT
    NICKNAME,
    PROFILE,
    USERLEVEL
FROM
    [USER]
WHERE
    (USER.UID, 15) IN (
        SELECT
            UID_FOLLOWER,
            UID_FOLLOWED
        FROM
            FOLLOW
    )
    AND (15, USER.UID) IN (
        SELECT
            UID_FOLLOWER,
            UID_FOLLOWED
        FROM
            FOLLOW
    );
```

结果：

	nickname	profile	userlevel
1	lonxxrn	whvgpw eoqn	4
2	jxoyhyxi	qktdlxsoc	8
3	iptfzi	mecclpnfnz	7
4	xhvklhqq	lhomvepcad	1
5	blrqmzfmq	gumzbdlh wz	7
6	hmmwj	trduqheuuq	8
7	iomug	hhgrwyfayd	0