

1. Table listing what labs are in each building.

```
SELECT BUILDING.BUILDING_ID, LAB_ID FROM BUILDING, LABS WHERE  
LABS.BUILDING_ID = BUILDING.BUILDING_ID;
```

```
+-----+-----+  
| BUILDING_ID | LAB_ID |  
+-----+-----+  
| 001      | 002   |  
| 002      | 003   |  
| 004      | 001   |  
| 004      | 004   |  
| 004      | 005   |  
| 006      | 006   |  
+-----+-----+
```

6 rows in set (0.01 sec)

2. Show how many pieces of equipment are in each lab.

```
select LAB_ID, count(EQUIP_ID) as 'Number of Equipment' FROM EQUIPMENT  
GROUP BY LAB_ID;
```

```
+-----+-----+  
| LAB_ID | Number of Equipment |  
+-----+-----+  
| 001   | 6 |  
| 002   | 6 |  
| 003   | 5 |  
| 004   | 6 |  
| 005   | 6 |  
| 006   | 5 |  
+-----+-----+
```

6 rows in set (0.00 sec)

3. List the make and model of each computer in a specific lab.

```
select computer.equip_make,computer.equip_model from computer,equipment where  
computer.computer_id=equipment.computer_id and lab_id = 001;
```

```
+-----+-----+  
| equip_make | equip_model |  
+-----+-----+  
| Dell      | Latitude D630 |  
| Dell      | Latitude D630 |  
| Dell      | Latitude E6410 |  
+-----+-----+
```

Dell	Latitude E6410
+-----+-----+	

4 rows in set (0.00 sec)

4. List what classes are held in a specific lab.

```
SELECT CLASS_ID FROM CLASS WHERE LAB_ID = 001;
```

CLASS_ID
+-----+
32729
33718
+-----+

2 rows in set (0.01 sec)

5. Table of Managers/students in charge of a lab

```
SELECT EMP_FNAME, EMP_LNAME, EMPLOYEE.EMPLOYEE_ID FROM
EMPLOYEE, LABS WHERE LABS.EMPLOYEE_ID = EMPLOYEE.EMPLOYEE_ID
AND LAB_ID = 002;
```

EMP_FNAME EMP_LNAME EMPLOYEE_ID
+-----+-----+
Cathy Neal 10109
+-----+-----+

1 row in set (0.00 sec)

6. Table displaying which departments are using a lab

```
SELECT DEPARTMENT_ID FROM LABS WHERE LAB_ID = 004;
```

DEPARTMENT_ID
+-----+
MA
+-----+

1 row in set (0.00 sec)

7. Number of students in a class for a lab

```
select count(stu_id ) as 'Number of Students in the Class' from attends,class,labs where
class.class_id=attends.class_id and labs.lab_id=class.lab_id and class.class_id = 32728
and class.lab_id = 003;
```

+-----+

Number of Students in the Class
4

1 row in set (0.00 sec)

8. Schedule of when a lab is occupied by a class
 select class_days,class_start_time,class_end_time from class;

class_days	class_start_time	class_end_time
MWF	08:00:00	09:00:00
MWF	09:30:00	10:50:00
TH	02:00:00	03:50:00
MWF	02:00:00	03:15:00
MWF	12:30:00	01:50:00
MWF	02:00:00	03:20:00

6 rows in set (0.00 sec)

9. List of when each lab was last updated
 SELECT LAB_ID, DATE_UPDATED FROM LABS;

LAB_ID	DATE_UPDATED
001	NULL
002	2016-05-25
003	2017-07-26
004	NULL
005	NULL
006	2015-02-16

6 rows in set (0.00 sec)

10. List of employees that work for ITS

```
SELECT EMP_FNAME, EMP_LNAME, EMPLOYEE_ID FROM EMPLOYEE
WHERE DEPARTMENT_ID LIKE '%ITS%';
```

```
+-----+-----+-----+
| EMP_FNAME | EMP_LNAME | EMPLOYEE_ID |
+-----+-----+-----+
| Van      | Alvarez  | 10101      |
| Joan     | Mason    | 10102      |
| Garry    | Clarke   | 10103      |
| Celia    | Alvarez  | 10104      |
| Evelyn   | Guzman   | 10105      |
| Cathy    | Neal     | 10109      |
+-----+-----+-----+
```

6 rows in set (0.00 sec)

11. Display layout type of each lab

```
SELECT LAB_ID, LAYOUT_TYPE FROM LABS;
```

```
+-----+-----+
| LAB_ID | LAYOUT_TYPE |
+-----+-----+
| 001    | Rows        |
| 002    | Rows        |
| 003    | Rows        |
| 004    | Rows        |
| 005    | U-Shape     |
| 006    | U-Shape     |
+-----+-----+
```

6 rows in set (0.01 sec)

12. List of equipment in need of repair

```
SELECT * FROM PROBLEMS GROUP BY EQUIP_ID;
```

```
+-----+-----+
| ERROR_ID | EQUIP_ID |
+-----+-----+
| 152      | 1001     |
| 501      | 1024     |
| 452      | 1026     |
| 256      | 1027     |
| 256      | 1033     |
+-----+-----+
```

5 rows in set (0.00 sec)

13. Table of software installed on each computer

```
SELECT SOFTWARE_DESCRIPT, SOFTWARE.SOFTWARE_ID,  
COMPUTER.COMPUTER_ID FROM SOFTWARE, INSTALLED, COMPUTER  
WHERE SOFTWARE.SOFTWARE_ID = INSTALLED.SOFTWARE_ID AND  
COMPUTER.COMPUTER_ID = INSTALLED.COMPUTER_ID  
ORDER BY COMPUTER.COMPUTER_ID;
```

SOFTWARE_DESCRIPT	SOFTWARE_ID	COMPUTER_ID
Word 2016	WRD16	0000001
Windows 10 OS	WIN10	0000001
Eclipse Oxygen	ECOXY	0000001
Windows 10 OS	WIN10	0000002
AutoDesk Inventor Professional 2017	AIV17	0000002
Windows 10 OS	WIN10	0000003
Eclipse Oxygen	ECOXY	0000003
Apple iTunes	APITS	0000004
Matrix Laboratory aka MatLab	MATLB	0000004
Python 3.6	PY3.6	0000004
AutoDesk Inventor Professional 2017	AIV17	0000005
Windows 10 OS	WIN10	0000005
MYSQL for SQL programming	MYSQL	0000006
Windows 10 OS	WIN10	0000006

14 rows in set (0.01 sec)

14. Display the errors that are occurring on all the equipment in a particular lab.

```
SELECT ERROR.ERROR_ID, ERROR_DESCRIPT, PROBLEMS.EQUIP_ID FROM ERROR,  
PROBLEMS, EQUIPMENT WHERE EQUIPMENT.EQUIP_ID = PROBLEMS.EQUIP_ID AND  
ERROR.ERROR_ID = PROBLEMS.ERROR_ID AND LAB_ID = '005';
```

ERROR_ID	ERROR_DESCRIPT	EQUIP_ID
256	Projector implosion	1027
302	Outlets not working properly	1027
335	Ports compromised	1027
452	Printer printing strangely	1026

452	Printer printing strangely	1027	
501	Projector projecting poor image quality	1024	
501	Projector projecting poor image quality	1027	
+-----+-----+-----+			

7 rows in set (0.01 sec)

15. Show all the students that have a class in a specific lab.

```
SELECT STUDENT.STU_ID, STU_FNAME, STU_LNAME FROM STUDENT, ATTENDS,
CLASS, LABS WHERE STUDENT.STU_ID = ATTENDS.STU_ID AND ATTENDS.CLASS_ID =
CLASS.CLASS_ID AND CLASS.LAB_ID = LABS.LAB_ID AND LABS.LAB_ID = 001;
```

+-----+-----+-----+		
STU_ID	STU_FNAME	STU_LNAME
+-----+-----+-----+		
3465524	Elisedd	Rozalija
3664415	Samhuel	Haf
3321154	Superfly	Steel
3465524	Elisedd	Rozalija
3485569	Kool	Dragon
3552251	Mariusz	Mila
+-----+-----+-----+		

6 rows in set (0.01 sec)