2

```
#2
mydbcon = mysql.connector.connect(host="localhost", user="root", passwd="@jasonchien1996", database="DB_class" )
mycursor = mydbcon.cursor()
mycursor.execute("select * from students where 學號='r09922146'")
print(mycursor.fetchone())
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
(70, '校內生\xa0', '資工系碩士班', 'r09922146', '簡辰哲', '一年級\xa0')
```

3

```
#3
mycursor.execute("select * from students where 系所='資工系碩士班' and 年級='一年級\xa0'")
print(mycursor.fetchall())
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
[(60, '校內生\xa0', '資工系碩士班', 'r09922003', '吳政緯', '一年級\xa0'), (61, '校內生\xa0', '資工系碩士班', 'r09922009', '林詩芩',
 '一年級\xa0'), (62, '校內生\xa0', '資工系碩士班', 'r09922056', '王柏元', '一年級\xa0'), (63, '校內生\xa0', '資工系碩士班', 'r099
22063', '鄭筠庭', '一年級\xa0'), (64, '校內生\xa0', '資工系碩士班', 'r09922080', '曾尹均', '一年級\xa0'), (65, '校內生\xa0', '資工
系碩士班', 'r09922083', '阮明皓', '一年級\xa0'), (66, '校內生\xa0', '資工系碩士班', 'r09922090', '王文依', '一年級\xa0'), (67, '校
內生\xa0', '資工系碩士班', 'r09922095', '陳昕璘', '一年級\xa0'), (68, '校內生\xa0', '資工系碩士班', 'r09922111', '鍾育昌', '一年
\xa0'), (69, '校內生\xa0', '資工系碩士班', 'r09922116', '邱聖約', '一年級\xa0'), (70, '校內生\xa0', '資工系碩士班', 'r09922146',
簡辰哲', '一年級\xa0'), (71, '校內生\xa0', '資工系碩士班', 'r09922155', '簡丞珮', '一年級\xa0'), (72, '校內生\xa0', '資工系碩士班'
 'r09922156', '李昭妤', '一年級\xa0'), (73, '校內生\xa0', '資工系碩士班', 'r09922167', '林琮珉', '一年級\xa0')]
```

4

```
#4
mycursor.execute("select count(學號) from students;")
print(mycursor.fetchone()[0])
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
85
```

5

```
#5
select = "SELECT * FROM students where 學號 = %(學號)s"
mycursor.execute(select, { '學號': 'r09921000' })
print(mycursor.fetchone())
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
(0, '旁聽生', '電機系碩士班', 'r09921000', '王大天', '一年級\xa0')
```

6

```
#6
mycursor.execute("update students set 身份='特優生' where 學號='r09922146'")
mycursor.execute("select * from students where 學號='r09922146'")
print(mycursor.fetchone())
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
(70, '特優生', '資工系碩士班', 'r09922146', '閻辰哲', '一年級\xa0')
```

7.

```
#7
data = [('旁聽生','歷史系','b09900201','小花','一年級'),
        ('校內生','歷史系','b06900332','小草','四年級'),
        ('校內生','機械系','b06502055','小天','四年級')]
insert = "insert into students (身份,系所,學號,姓名,年級) values (%s,%s,%s,%s,%s)"
mycursor.executemany(insert, data)
```

8

```
#8
mycursor = mydbcon.cursor(prepared=True)
select = "SELECT * FROM students where 學號 = %s"
mycursor.execute(select, ('b09900201',))
print(mycursor.fetchone())
mycursor.execute(select, ('b06900332',))
print(mycursor.fetchone())
mycursor.execute(select, ('b06502055',))
print(mycursor.fetchone())
```

Result:

```
(base) C:\Users\Jason\Desktop>python hw4.py
(None, '旁聽生', '歷史系', 'b09900201', '小花', '一年級')
(None, '校內生', '歷史系', 'b06900332', '小草', '四年級')
(None, '校內生', '機械系', 'b06502055', '小天', '四年級')
```