

	dNo	dName	cName	countStaff
0	1	Department of History	John Smith	12
1	2	Department of Physics	Kenny Hubbard	22
2	3	Department of English	Kenneth Floyd	32
3	4	Department of Psychology	Leslie Thornton	42
4	5	Department of Art and Science	Gilbert Stephens	52

	mName	mID	code	dNo
0	American history	1	AMH	1
1	European history	2	EUH	1
2	General Psychology Concentration	3	GPC	4
3	Computer Science	4	CSC	5
4	Language Arts Literacy	5	LAL	3

	sfName	slName	slInitial	sID
0	Yunting	Zhao	YZ	1
1	Dominick	Townsend	DT	2
2	Yiyi	He	YH	3
3	Liuhu	Lan	LL	4
4	Qiao	Chu	QC	5

	eName	eID	startDate	endDate
0	event1	1	2021-12-18	2021-12-19
1	event2	2	2021-12-20	2021-12-21
2	event3	3	2021-12-22	2021-12-23
3	event4	4	2021-12-24	2021-12-25
4	event5	5	2021-12-26	2021-12-27

	sID	mID
0	1	1
1	2	2
2	3	3
3	4	4
4	5	4

	dNo	eID
0	1	1
1	2	2
2	3	3
3	4	4
4	5	5

	sID	eID
0	1	1
1	2	2
2	3	3
3	4	4
4	5	5

=====5 select =====

1. Select students whose last name is Zhao

query = ""

SELECT *

FROM Student

WHERE sName LIKE 'Zhao%'

""

cursor.execute(query)

column_names = [row[0] for row in cursor.description]

table_data = cursor.fetchall()

```
df= pd.DataFrame(table_data, columns=column_names)
```

```
db_connect.commit()
```

```
# db_connect.close()
```

```
df
```

```
[8]: query = """
      SELECT *
      FROM Student
      WHERE sName LIKE 'Zhao%'
      """

      cursor.execute(query)
      column_names = [row[0] for row in cursor.description]
      table_data = cursor.fetchall()
      df= pd.DataFrame(table_data, columns=column_names)

      db_connect.commit()

      # db_connect.close()
      df
```

```
[8]:
```

	sfName	sName	sInitial	sID
0	Yunting	Zhao	YZ	1

2. Show the event details that Yunting participated

```
query = """
```

```
SELECT sfName, Event.*
```

```
FROM Event, Student
```

```
JOIN Participation
```

```
ON Event.eID = Participation.eID AND Participation.sID = Student .sID
```

```
Where Student .sfName = 'Yunting'
```

```
      """
```

```
cursor.execute(query)
```

```
column_names = [row[0] for row in cursor.description]
```

```
table_data = cursor.fetchall()
```

```
df= pd.DataFrame(table_data, columns=column_names)
```

```
db_connect.commit()
```

```
# db_connect.close()
df
```

```
query = """
SELECT sfName, Event.*
FROM Event, Student
JOIN Participation
ON Event.eID = Participation.eID AND Participation.sID = Student .sID
Where Student .sfName = 'Yunting'

"""

cursor.execute(query)
column_names = [row[0] for row in cursor.description]
table_data = cursor.fetchall()
df= pd.DataFrame(table_data, columns=column_names)

db_connect.commit()

# db_connect.close()
df
```

	sfName	eName	eID	startDate	endDate
0	Yunting	event1	1	2021-12-18	2021-12-19

3. Show the major code that Yunting enrolled

```
query = """
SELECT sfName, Major.code
FROM Major, Student
JOIN Enrollment
ON Major.mID = Enrollment.mID AND Enrollment.sID = Student .sID
Where Student .sfName = 'Yunting'

"""
```

```
cursor.execute(query)
column_names = [row[0] for row in cursor.description]
table_data = cursor.fetchall()
df= pd.DataFrame(table_data, columns=column_names)
```

```
db_connect.commit()
```

```
# db_connect.close()
```

```
df
```

4.list all the major that RU offered

```

: query = """
SELECT Major.*
FROM Major

      """
cursor.execute(query)
column_names = [row[0] for row in cursor.description]
table_data = cursor.fetchall()
df= pd.DataFrame(table_data, columns=column_names)

db_connect.commit()

# db_connect.close()
df

```

```

:
      mName  mID  code  dNo
0      American history      1  AMH      1
1      European history      2  EUH      1
2  General Psychology Concentration      3  GPC      4
3      Computer Science      4  CSC      5
4      Language Arts Literacy      5  LAL      3

```

5.list all the event school has

```

query = """
SELECT Event.*
FROM Event

"""

cursor.execute(query)
column_names = [row[0] for row in cursor.description]
table_data = cursor.fetchall()
df= pd.DataFrame(table_data, columns=column_names)

db_connect.commit()

# db_connect.close()
df

```

	eName	eID	startDate	endDate
0	event1	1	2021-12-18	2021-12-19
1	event2	2	2021-12-20	2021-12-21
2	event3	3	2021-12-22	2021-12-23
3	event4	4	2021-12-24	2021-12-25
4	event5	5	2021-12-26	2021-12-27

```

query = """
SELECT sfName, Major.code
FROM Major, Student
JOIN Enrollment
ON Major.mID = Enrollment.mID AND Enrollment.sID = Student .sID
Where Student .sfName = 'Yunting'

      """

cursor.execute(query)
column_names = [row[0] for row in cursor.description]
table_data = cursor.fetchall()
df= pd.DataFrame(table_data, columns=column_names)

db_connect.commit()

# db_connect.close()
df

```

	sfName	code
0	Yunting	AMH