

Please follow the instructions below to prepare the demo (each demo will be given 15 minutes).

1. Introduce the schemas of the tables in your database.
2. Use the following command to list the tables:

```
select table_name from user_tables;
```
3. Use the *insert* statement to add some records (students, books, borrowings, reservation, etc.) to your database. Some sample data are shown as follows but your tables may not have the same structures.

Student-number	Name	Gender	Department
12345678	A	M	Comp
11111111	B	M	Math
22222222	C	F	COMM
33333333	D	F	COMM
44444444	E	M	Comp
55555555	F	M	COMM
66666666	G	F	Math
77777777	H	M	Comp

Call-number	ISBN	Title	Author	Amount	Location
A0000	0-306-40615-1	AA	XX	0	S1E01
B0000	0-306-40615-2	BB	YY	0	S2E02
C1111	0-306-40615-3	CC	ZZ	2	D1E11
B0001	0-306-40615-4	DD	UU	2	G1E00
A1111	0-306-40615-5	EE	VV	2	B1E00
D0101	0-306-40615-6	FF	WW	1	B2E11
E0000	0-306-40615-7	GG	PP	0	X0E22
E0100	0-306-40615-8	HH	QQ	2	X0E21
E0111	0-306-40615-9	II	RR	0	X0E44

Borrower	Book	Borrow date	Due date
11111111	D0101	24/Mar/2025	21/Apr/2025
55555555	A1111	23/Mar/2025	20/Apr/2025
22222222	B0000	31/Mar/2025	12/May/2025
11111111	A0000	1/Apr/2025	29/Apr/2025
33333333	A0000	3/Apr/2025	1/May/2025
11111111	B0000	3/Apr/2025	15/May/2025
44444444	C1111	4/Apr/2025	16/May/2025
44444444	A0000	6/Apr/2025	4/May/2025

33333333	C1111	6/Apr/2025	4/May/2025
33333333	A1111	6/Apr/2025	4/May/2025
33333333	B0001	6/Apr/2025	4/May/2025
44444444	D0101	10/Apr/2025	8/May/2025
33333333	D0101	10/Apr/2025	8/May/2025
44444444	A1111	14/Apr/2025	12/May/2025
55555555	C1111	18/Apr/2025	16/May/2025
22222222	E0111	19/Apr/2025	17/May/2025
11111111	E0000	20/Apr/2025	18/May/2025
44444444	B0001	21/Apr/2025	19/May/2025

Student-number	Reserved book	Request date
12345678	A0000	20/Apr/2025
66666666	E0000	22/Apr/2025

Student-number	Renewed book
22222222	B0000
11111111	B0000
44444444	C1111

4. Test the function of book search.
5. Test the functions of the book borrowing and the book return. **Assume that today is April 24, 2025:**
 - a) Student 22222222 borrows book B0001. The response should be like “The borrowing succeeded”. **The amount of book B0001 should be updated by the trigger.**
 - b) Student 66666666 borrows book B0000. The response should be “The book is not available at present”.
 - c) Student 44444444 borrows book E0100. The response should be like “You have already borrowed 5 books”.
 - d) Student 55555555 borrows book D0101. The response should as “You have at least one overdue book, you cannot make a new borrowing”.
 - e) Student 11111111 returns book E0000. **The amount of book E0000 should be updated by the trigger.**
 - f) Student 12345678 borrows book E0000. The response should be like “The book is reserved by another student”.

- g) Student 66666666 borrows book E0000. The response should be like “The borrowing succeeded”. Next, student 77777777 borrows book E0000. The response should be like “The book is not available at present”.
6. Test the function of the borrowing renewal. **Assume that today is April 24, 2025:**
- a) Student 22222222 renews book B0000. The response should be like “This book cannot be renewed again”.
 - b) Student 11111111 renews book D0101. The response should be like “You have at least one overdue book, you cannot make a new borrowing”.
 - c) Student 44444444 renews book A0000. The response should be like “The book is reserved by another student”.
 - d) Student 44444444 renews book B0001. The response should be like “The renewal is not yet available”.
 - e) Student 33333333 renews book C1111. The response should be like “The borrowed book is renewed successfully”. (**Check the renewal information**)
7. Test the function of the book reservation:
- a) Student 22222222 reserves book C1111. The response should be like “The book is now available. No reservation is required”.
 - b) Student 44444444 reserves book A0000. The response should be like “Reserving a borrowed book is not allowed”.
 - c) Student 12345678 reserves book B0000. The response should be like “Multiple reservations are not allowed”.
 - d) Student 77777777 reserves book B0000. The response should be like “The reservation succeeded”. (**Check the reservation information**)