

Please follow the instructions below to prepare the demo (**each demo will be given 10 minutes**).

1. Hand in a hard-copy paper that describes the definitions of the tables in your database.

2. Use the following command to list the tables:

select table_name from user_tables;

3. Add some student, book and borrow data into the database (some sample data are shown below, yet your tables may not follow exactly the structures below)

insert into table_name values(...);

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

If your table doesn't have field "Book-number", you can consider the values in this field as ISBN

Book-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	A0000	30/Mar/2016	27/Apr/2016
22222222	B0000	15/Mar/2016	26/Apr/2016
33333333	A0000	26/Mar/2016	23/Apr/2016
11111111	B0000	15/Mar/2016	26/Apr/2016
44444444	C1111	18/Mar/2016	29/Apr/2016

44444444	B0001	10/Apr/2016	8/May/2016
44444444	A0000	25/Mar/2016	22/Apr/2016
33333333	C1111	25/Mar/2016	22/Apr/2016
44444444	D0101	26/Mar/2016	23/Apr/2016
44444444	A1111	27/Mar/2016	24/Apr/2016
55555555	A1111	15/Mar/2016	12/Apr/2016
55555555	C1111	25/Mar/2016	22/Apr/2016
11111111	E0000	18/Mar/2016	15/Apr/2016
33333333	A1111	25/Mar/2016	22/Apr/2016
33333333	B0001	25/Mar/2016	22/Apr/2016
33333333	D0101	28/Mar/2016	25/Apr/2016
11111111	D0101	04/Mar/2016	01/Apr/2016
22222222	E0111	26/Mar/2016	23/Apr/2016

Student-number	Reserved book-number
12345678	A0000
66666666	E0000

Student-number	Renewed book-number
22222222	B0000
11111111	B0000
44444444	C1111

4. Test the function for searching a book.
5. Test the function for borrowing/returning a book (**Assuming today is April 21, 2016**):
 - a) Student “22222222” wants to borrow book “B0001”. Should response like: “Borrow succeed”. (**The amount of B0001 should be updated by trigger**)
 - b) Student “66666666” wants to borrow book “B0000”. Should response like: “No book available at present.”
 - c) Student “44444444” wants to borrow book “E0100”. Should response like: “You have already borrowed 5 books.”
 - d) Student “55555555” wants to borrow book “D0101”. Should response like: “You have borrowed book overdue.”
 - e) Student “11111111” returns book “E0000”. (**The amount of E0000 should be updated by trigger**)
 - f) Student “12345678” wants to borrow book “E0000”. Should response like: “The book has already been reserved by another student.”

- g) **(Note: the following tests should be put in the end, after the renew/reserve test)** Student “66666666” wants to borrow book “E0000”. Should response like: “Borrow succeed.” Next, Student “77777777” wants to borrow book “E0000”. Should response like: “No book available at present.”
6. Test the function for renewing a book (**Assuming today is April 21, 2016**):
- a) Student “22222222” wants to renew book “B0000”. Should response like: “The book has already been renewed”.
 - b) Student “11111111” wants to renew book “D0101”. Should response like: “You have borrowed book overdue.”
 - c) Student “12345678” wants to renew book “E0000”. Should response like: “The book has already been reserved by another student”.
 - d) Student “44444444” wants to renew book “B0001”. Should response like: “Please wait until the second half of the borrow period”.
 - a) Student “33333333” wants to renew book “C1111”. Should response like: “renew succeed”. (**Check the content of renew table**)
7. Test the function for reserving a book:
- b) Student “22222222” wants to reserve book “C1111”. Should response like: “There is book available, no need to reserve”.
 - c) Student “44444444” wants to reserve book “A0000”. Should response like: “You have already borrowed this book”.
 - d) Student “12345678” wants to reserve book “B0000”. Should response like: “You have already reserved a book”.
 - e) Student “77777777” wants to reserve book “B0000”. Should response like: “Reserve succeed”. (**Check the content of reserve table**)