DATABASE:

CREATING OF AUTHOR TABLE

CREATE TABLE Author (

Author_name VARCHAR(60),

A_DOB DATE,

PRIMARY KEY(Author_name)

);

INSERT INTO Author VALUES('Adams.Q.Douglas', '05-DEC-1967');

INSERT INTO Author VALUES('Asimov.Z.Issac', '30-DEC-1975');

INSERT INTO Author VALUES('Card.S.Orson', '23-JUL-1942');

INSERT INTO Author VALUES('George.J.Orwell', '05-JUN-1930');

INSERT INTO Author VALUES('Ira.T.Betkowitz', '12-MAR-1954');

INSERT INTO Author VALUES('J.T.Tolkein', '12-MAR-1960');

SELECT * FROM Author;

CREATING OF EMPLOYEE TABLE:

CREATE TABLE Employee(

empid INT,

empname VARCHAR(30),

salary INT,

E_DOB DATE,

phone_num INT,

Job VARCHAR(30),

e_username varchar(30),

e_password varchar(30),

PRIMARY KEY (empid));

INSERT INTO Employee VALUES(2345, 'S.VINOD', 20000, '16-SEP-1991', 7445689170, 'Library Manager', '2345l@iiitk.ac.in', 'Vinod@5');

INSERT INTO Employee VALUES(4567, 'B.NAVEEN REDDY', 8500, '26-JAN-1993', 9978145678, 'Record Manager', '4567l@iiitk.ac.in', 'Naveen@7');

INSERT INTO Employee VALUES(1234, 'P.RAMESH KUMAR', 10000, '9-JAN-1995', 8789456751, 'Librarian', '1234l@iiitk.ac.in', 'Ramesh@4');

INSERT INTO Employee VALUES(6789, 'V.VIMALA', 8000, '26-OCT-2000', 7458123644, 'Librarian', '6789l@iiitk.ac.in', 'Vimala@9');

INSERT INTO Employee VALUES(3456, 'K.SREE VANI', 8000, '14-MAY-1996', 6301457968, 'Asst.Librarian', '3456l@iiitk.ac.in', 'Sreevani@6');

INSERT INTO Employee VALUES(5678, 'P.SURESH', 7000, '16-MAR-2000', 8332897416, 'Attender', '5678l@iiitk.ac.in', 'Suresh@8');

SELECT * FROM Employee;

CREATING STUDENT TABLE

CREATE TABLE Student (

Library_card_number VARCHAR(30),

S_Name VARCHAR(30),

S_DOB DATE,

Mail_id VARCHAR(30),

Phone_number INT,

PRIMARY KEY (Library_card_number)

);

INSERT INTO Student VALUES('119CS0025', 'T.SWETHA REDDY', '23-MAR-2001', '119cs0025@iiitk.ac.in', 9978451621);

INSERT INTO Student VALUES('119CS0013', 'K.SWATHI', '24-MAY-2002', '119cs0013@iiitk.ac.in', 7458123645);

INSERT INTO Student VALUES('119CS0019', 'C.JYOTHIKA', '07-APR-2002', '119cs0019@iiitk.ac.in', 9457861245);

INSERT INTO Student VALUES('119EC0005', 'V.SRUTHI', '23-OCT-2001','119ec0005@iiitk.ac.in', 7412589631);

```
INSERT INTO Student VALUES('119ME0007', 'C.PAVAN KUMAR', '18-FEB-2001',
'119me0007@iiitk.ac.in', 6012345678);

INSERT INTO Student VALUES('118EC0001', 'V.SPANDANA', '01-DEC-2000',
'118ec0001@iiitk.ac.in', 9784561234);

INSERT INTO Student VALUES('118CS0015','M.DEVI SIVA PRIYA', '29-MAY-2000',
'118cs0015@iiitk.ac.in', 7845129631);

SELECT * FROM Student;
```

CREATING MEDIA TABLE

```
CREATE TABLE Media (

Barcode INT,

Title VARCHAR(60),

ISBN INT,

Edition_ INT,

Published_Date DATE,

Publisher VARCHAR(60),

Type_ VARCHAR(30),

Subject VARCHAR(30),

Order_Cost INT,

Initial_condition VARCHAR(30),

PRIMARY KEY(Barcode)

);

INSERT INTO Media VALUES(51354873, 'Animal Farm-1984', 184046245, 0, '01-JAN-
2003', 'Palgrave Macmillan', 'DVD', 'Palgrave Macmillan', 27, 'NEW');

INSERT INTO Media VALUES(53245532, 'Oracle PL/SQL Programming', 200993845, 5,
'04-MAR-2010',  'O'Reilly', 'BOOK', 'DBMS', 25, 'NEW');

INSERT INTO Media VALUES(54879624, 'Algorithms', 812550706, 4, '01-JAN-1994',
'Pearson', 'BOOK', 'DAA', 8, 'NEW');

INSERT INTO Media VALUES(54897327, 'Computer Architecture and Organisation',
553293354, 3, '01-JAN-1991', 'McGraw-Hill', 'BOOK','COA', 8, 'NEW' );
```

INSERT INTO Media VALUES(56478922, 'OOP IN C++', 932112448, 4, '01-JAN-2006', 'Harding', 'BOOK', 'OOP', 16, 'NEW');

INSERT INTO Media VALUES(59876249, 'FOUNDATION', 345391810, 1, '01-JAN-1995', 'Speectra', 'BOOK', 'HRS', 8, 'NEW');

select * from Media;

CREATING MEDIA AUTHOR TABLE

CREATE TABLE Media_Author(

Barcode INT,

Author_name VARCHAR(30),

A_DOB DATE,

PRIMARY KEY(Barcode),

FOREIGN KEY(Barcode) REFERENCES Media(Barcode),

FOREIGN KEY(Author_name) REFERENCES Author(Author_name)

);

INSERT INTO Media_Author VALUES(51354873, 'Adams.Q.Douglas', '05-DEC-1967');

INSERT INTO Media_Author VALUES(53245532, 'J.T.Tolkein', '12-MAR-1960');

INSERT INTO Media_Author VALUES(54879624, 'Card.S.Orson', '23-JUL-1942');

INSERT INTO Media_Author VALUES(54897327, 'Asimov.Z.Issac', '30-DEC-1975');

INSERT INTO Media_Author VALUES(56478922, 'Ira.T.Betkowitz', '12-MAR-1954');

INSERT INTO Media_Author VALUES(59876249, 'Adams.Q.Douglas', '05-DEC-1967');

SELECT * FROM Media_Author;

CREATING CONDITION TABLE

CREATE TABLE Condition(

Grade VARCHAR(30),

Cost_percentage INT);

INSERT INTO Condition VALUES('GOOD', 80);

INSERT INTO Condition VALUES('AVERAGE', 70);

INSERT INTO Condition VALUES('NEW', 100);

INSERT INTO Condition VALUES('NEW-GOOD', 90);

INSERT INTO Condition VALUES('POOR', 60);

INSERT INTO Condition VALUES('REPLACE', 50);

SELECT * FROM Condition;

CREATING CHECKOUT TABLE

CREATE TABLE Check_out(

Library_card_number VARCHAR(30),

Barcode INT,

Checkoutdate DATE,

Renewed INT,

Amount_Paid INT,

Fee INT,

Tobereturndate DATE,

Checkindate DATE,

Current_condition VARCHAR(30),

PRIMARY KEY (Library_card_number,Checkoutdate),

FOREIGN KEY (Library_card_number) REFERENCES Student(Library_card_number),

FOREIGN KEY (Barcode) REFERENCES Media(Barcode)

);

Insert into Check_out values('119CS0025', 51354873, '14-APR-2020', 0, 0, 0, '05-MAY-2020','30-APR-2020','GOOD');

Insert into Check_out values('119CS0025', 51354873, '20-APR-2020', 0, 0, 0, '30-APR-2020', '20-MAY-2020', 'NEW-GOOD');

Insert into Check_out values('119CS0025', 51354873, '04-MAY-2020', 0, 0, 0, '18-MAY-2020', '10-MAY-2020', 'GOOD');

Insert into Check_out values('119CS0025', 53245532, '29-NOV-2020', 0, 0, 0, '13-DEC-2020', '30-DEC-2020', 'NEW');

Insert into Check_out values('119CS0025', 54897327, '01-APR-2020', 0, 6, 0, '15-APR-2020', '06-MAY-2020', 'AVERAGE');

Insert into Check_out values('119CS0025', 56478922, '07-APR-2020', 0, 0, 0, '21-APR-2020', '07-MAY-2020', 'NEW');

Insert into Check_out values('119CS0025', 59876249, '08-SEP-2020', 0, 0, 0, '22-SEP-2020', '06- MAY-2020', 'NEW-GOOD');

Insert into Check_out values('119CS0013', 51354873, '30-APR-2020', 0, 0, 0, '14-MAY-2020', '11-MAY-2020', 'NEW-GOOD');

Insert into Check_out values('119CS0019', 51354873, '21-APR-2020', 1, 0, 0, '12-MAY-2020', '23-APR-2020', 'NEW');

Insert into Check_out values('119EC0005', 54879624, '05-MAY-2020', 0, 0, 0, '19-MAY-2020', '27-MAY-2020', 'NEW');

select * from Check_out;

CREATING RESERVATION TABLE

CREATE TABLE Reservation(

Library_card_number VARCHAR(30),

Barcode INT,

Date_requested DATE,

Check_out_status VARCHAR(30),

Reshelf_date DATE,

PRIMARY KEY (Library_card_number,Barcode,Reshelf_date),

FOREIGN KEY (Library_card_number) REFERENCES Student(Library_card_number),

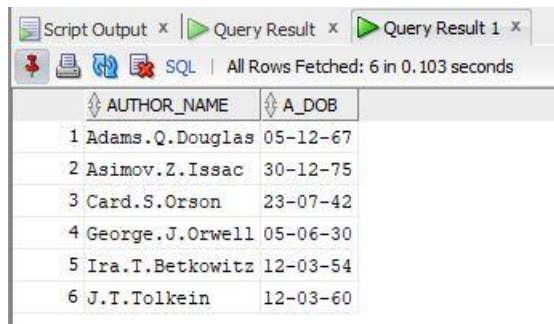FOREIGN KEY (Barcode) REFERENCES Media(Barcode));

INSERT INTO Reservation VALUES('119CS0025', 54879624, '12-MAR-2020', 'YES', '16-MAR-2020');

INSERT INTO Reservation VALUES('119CS0025', 54879624, '08-JUN-2020', 'NO', '12-JUN-2020');
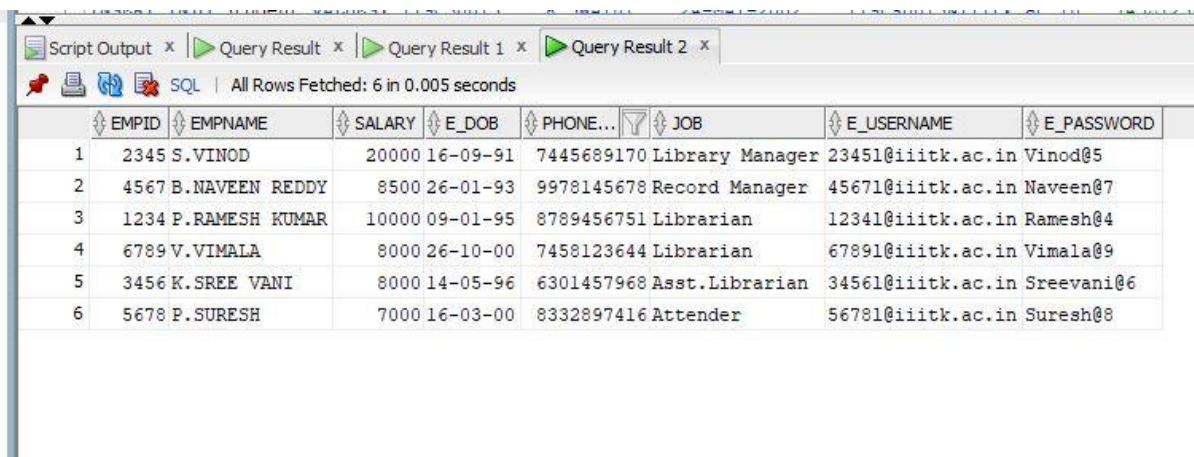
SELECT * FROM Reservation;

TABLES:

AUTHOR TABLE:

	AUTHOR_NAME	A_DOB
1	Adams.Q.Douglas	05-12-67
2	Asimov.Z.Issac	30-12-75
3	Card.S.Orson	23-07-42
4	George.J.Orwell	05-06-30
5	Ira.T.Betkowitz	12-03-54
6	J.T.Tolkein	12-03-60

Script Output × | Query Result × | Query Result 1 ×
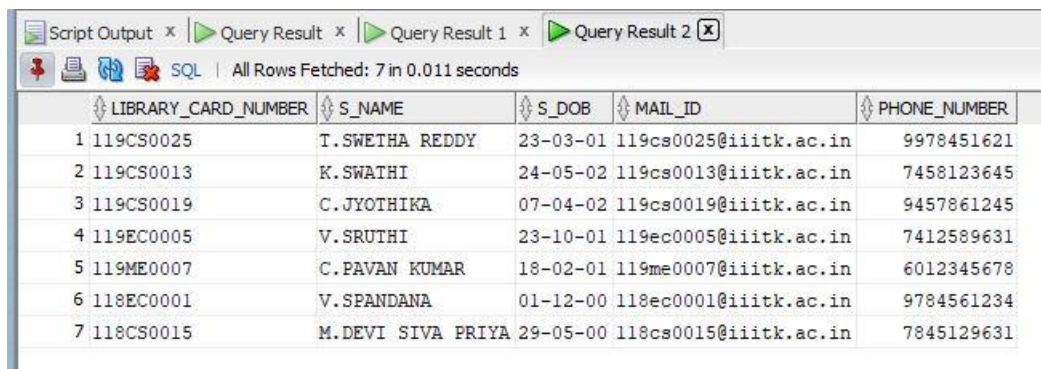SQL | All Rows Fetched: 6 in 0.103 seconds

EMPLOYEE TABLE:

Script Output × | Query Result × | Query Result 1 × | Query Result 2 ×
SQL | All Rows Fetched: 6 in 0.005 seconds

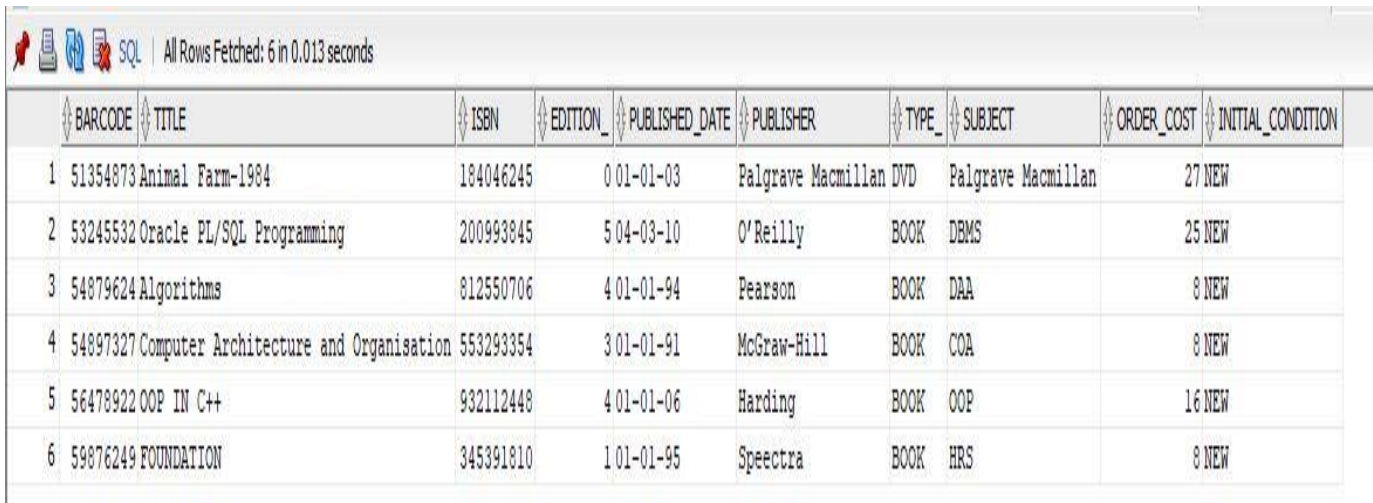|	EMPID	EMPNAME	SALARY	E_DOB	PHONE...	JOB	E_USERNAME	E_PASSWORD
1	2345	S.VINOD	20000	16-09-91	7445689170	Library Manager	23451@iiitk.ac.in	Vinod@5
2	4567	B.NAVEEN REDDY	8500	26-01-93	9978145678	Record Manager	45671@iiitk.ac.in	Naveen@7
3	1234	P.RAMESH KUMAR	10000	09-01-95	8789456751	Librarian	12341@iiitk.ac.in	Ramesh@4
4	6789	V.VIMALA	8000	26-10-00	7458123644	Librarian	67891@iiitk.ac.in	Vimala@9
5	3456	K.SREE VANI	8000	14-05-96	6301457968	Asst.Librarian	34561@iiitk.ac.in	Sreevani@6
6	5678	P.SURESH	7000	16-03-00	8332897416	Attender	56781@iiitk.ac.in	Suresh@8

STUDENT TABLE:

Script Output × | Query Result × | Query Result 1 × | Query Result 2
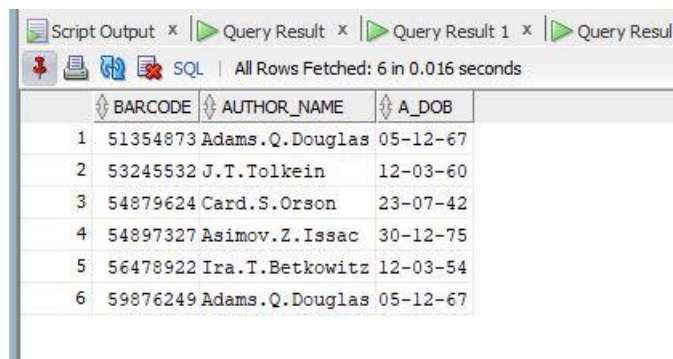SQL | All Rows Fetched: 7 in 0.011 seconds

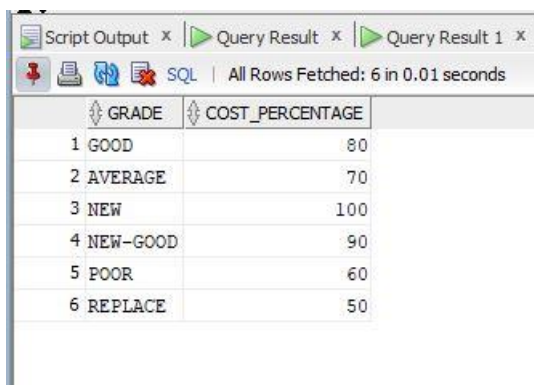|	LIBRARY_CARD_NUMBER	S_NAME	S_DOB	MAIL_ID	PHONE_NUMBER
1	119CS0025	T.SWETHA REDDY	23-03-01	119cs0025@iiitk.ac.in	9978451621
2	119CS0013	K.SWATHI	24-05-02	119cs0013@iiitk.ac.in	7458123645
3	119CS0019	C.JYOTHIKA	07-04-02	119cs0019@iiitk.ac.in	9457861245
4	119EC0005	V.SRUTHI	23-10-01	119ec0005@iiitk.ac.in	7412589631
5	119ME0007	C.PAVAN KUMAR	18-02-01	119me0007@iiitk.ac.in	6012345678
6	118EC0001	V.SPANDANA	01-12-00	118ec0001@iiitk.ac.in	9784561234
7	118CS0015	M.DEVI SIVA PRIYA	29-05-00	118cs0015@iiitk.ac.in	7845129631

MEDIA TABLE:

	BARCODE	TITLE	ISBN	EDITION_	PUBLISHED_DATE	PUBLISHER	TYPE_	SUBJECT	ORDER_COST	INITIAL_CONDITION
1	51354873	Animal Farm-1984	184046245	0	01-01-03	Palgrave Macmillan	DVD	Palgrave Macmillan	27	NEW
2	53245532	Oracle PL/SQL Programming	200993845	5	04-03-10	O'Reilly	BOOK	DBMS	25	NEW
3	54879624	Algorithms	812550706	4	01-01-94	Pearson	BOOK	DAA	8	NEW
4	54897327	Computer Architecture and Organisation	553293354	3	01-01-91	McGraw-Hill	BOOK	COA	8	NEW
5	56478922	OOP IN C++	932112448	4	01-01-06	Harding	BOOK	OOP	16	NEW
6	59876249	FOUNDATION	345391810	1	01-01-95	Speectra	BOOK	HRS	8	NEW

MEDIA_AUTHOR TABLE:

	BARCODE	AUTHOR_NAME	A_DOB
1	51354873	Adams.Q.Douglas	05-12-67
2	53245532	J.T.Tolkein	12-03-60
3	54879624	Card.S.Orson	23-07-42
4	54897327	Asimov.Z.Issac	30-12-75
5	56478922	Ira.T.Betkowitz	12-03-54
6	59876249	Adams.Q.Douglas	05-12-67

CONDITION TABLE:

	GRADE	COST_PERCENTAGE
1	GOOD	80
2	AVERAGE	70
3	NEW	100
4	NEW-GOOD	90
5	POOR	60
6	REPLACE	50

CHECKOUT TABLE

	LIBRARY_CARD_NUMBER	BARCODE	CHECKOUTDATE	RENEWED	AMOUNT_PAID	FEE	TOBERETURNDATE	CHECKINDATE	CURRENT_CONDITION
1	119CS0025	51354873	14-04-20	0	0	0	05-05-20	30-04-20	GOOD
2	119CS0025	51354873	20-04-20	0	0	0	30-04-20	20-05-20	NEW-GOOD
3	119CS0025	51354873	04-05-20	0	0	0	18-05-20	10-05-20	GOOD
4	119CS0025	53245532	29-11-20	0	0	0	13-12-20	30-12-20	NEW
5	119CS0025	54897327	01-04-20	0	6	0	15-04-20	06-05-20	AVERAGE
6	119CS0025	56478922	07-04-20	0	0	0	21-04-20	07-05-20	NEW
7	119CS0025	59876249	08-09-20	0	0	0	22-09-20	06-05-20	NEW-GOOD
8	119CS0013	51354873	30-04-20	0	0	0	14-05-20	11-05-20	NEW-GOOD
9	119CS0019	51354873	21-04-20	1	0	0	12-05-20	23-04-20	NEW
10	119EC0005	54879624	05-05-20	0	0	0	19-05-20	27-05-20	NEW

RESERVATION TABLE

	LIBRARY_CARD_NUMBER	BARCODE	DATE_REQUESTED	CHECK_OUT_STATUS	RESHELF_DATE
1	119CS0025	54879624	12-03-20	YES	16-03-20
2	119CS0025	54879624	08-06-20	NO	12-06-20

RANDOM QUERIES:

1.Dispaly the names of the employee's whose salary is 8000

select empname from Employee

where salary = 8000;

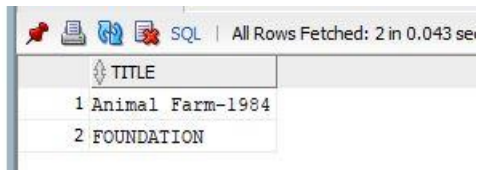|	EMPNAME
1	V.VIMALA
2	K.SREE VANI

2.Display number of people checkedout the dvd animal farm-1984.

select count(distinct(Library_card_number)) from check_out

where Barcode = 51354873;

	COUNT(DISTINCT(LIBRARY_CARD_NUMBER))
1	3

3.Display all the books written by 'Adams.Q.Douglas'

select Media.Title from Media, Media_Author

where Media_Author.Author_name = 'Adams.Q.Douglas'
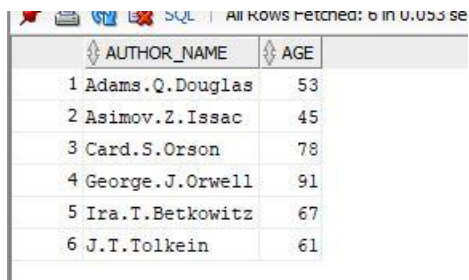
and Media.Barcode = Media_Author.Barcode;

	TITLE
1	Animal Farm-1984
2	FOUNDATION

SQL | All Rows Fetched: 2 in 0.043 se

4.Display the names and ages of all the Authors.

select Author_name, floor((sysdate-A_DOB)/365) as age FROM Author;

SQL | All Rows Fetched: 6 in 0.053 se

	AUTHOR_NAME	AGE
1	Adams.Q.Douglas	53
2	Asimov.Z.Issac	45
3	Card.S.Orson	78
4	George.J.Orwell	91
5	Ira.T.Betkowitz	67
6	J.T.Tolkein	61