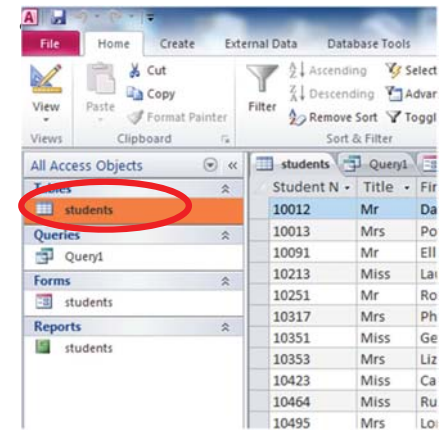


Session (01.03) Building Database using Microsoft Access III

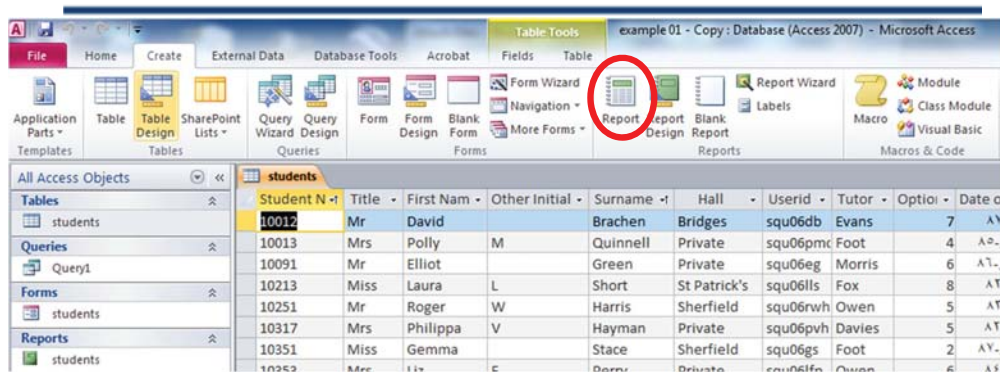
Dr. Ahmed M. ElShafee

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

Reports



Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I



Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

students						
Student Number	Surname	Title	First Name	Other Initials	Hall	Userid
10012	Brachen	Mr	David		Bridges	squ06db
10013	Quinnell	Mrs	Polly	M	Private	squ06pmq
10091	Green	Mr	Elliot		Private	squ06eg
10213	Short	Miss	Laura	L	St Patrick's	squ06lls
10251	Harris	Mr	Roger	W	Sherfield	squ06rvh
10317	Hayman	Mrs	Philippa	V	Private	squ06pvh
10351	Stace	Miss	Gemma		Sherfield	squ06gs
10353	Perry	Mrs	Liz	F	Private	squ06lfp
10423	Hattan	Miss	Caroline	T	Windsor	squ06cth
10464	Hopkins	Miss	Ruth	F	Private	squ06rfh
10495	Moon	Mrs	Lorna	B	Private	squ06lbm
10563	Stratton	Mr	Julian	K.P.	Childs	squ06jks
10703	O'Sullivan	Miss	Linda	R	St George's	squ06lro

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

students students1

students

Student Number	Surname	Title	First Name
10012	Brachen	Mr	David
10013	Quinnell	Mrs	Polly
10091	Green	Mr	Elliot
10213	Short	Miss	Laura
10251	Harris	Mr	Roger
10317	Hayman	Mrs	Philippa
10351	Stace	Miss	Gemma
10353	Perry	Mrs	Liz
10423	Hattan	Miss	Caroline
10464	Hopkins	Miss	Ruth
10495	Moon	Mrs	Lorna
10563	Stratton	Mr	Julian
10703	O'Sullivan	Miss	Linda

students students1

students

٢٠١٣ سبتمبر ١١
٠٩:٣٥:٣٨ م

Student Number	First Name	Surname	Title	Hall	Userid
10012	David	Brachen	Mr	Bridges	squ06db
10013	Polly	Quinnell	Mrs	Private	squ06pmq
10091	Elliot	Green	Mr	Private	squ06eg
10213	Laura	Short	Miss	St Patrick's	squ06lls
10251	Roger	Harris	Mr	Sherfield	squ06rwh
10317	Philippa	Hayman	Mrs	Private	squ06pvh
10351	Gemma	Stace	Miss	Sherfield	squ06gs
10353	Liz	Perry	Mrs	Private	squ06lfp
10423	Caroline	Hattan	Miss	Windsor	squ06cth
10464	Ruth	Hopkins	Miss	Private	squ06rfh
10495	Lorna	Moon	Mrs	Private	squ06lbn
10563	Julian	Stratton	Mr	Childs	squ06jks
10703	Linda	O'Sullivan	Miss	St George's	squ06lro

File Home Create External Data Database Tools Acrobat Design Arrange Font

Save As

Report Name: students1

OK Cancel

Green Mr Private

File Home Create External Data Database Tools Acrobat Design Arrange Font

Views Themes Grouping & Totals

All Access Objects

Tables

students

Queries

Query1

Forms

students

Reports

students

students1

students

Student Number First Name Surname

10012	David	Brachen
10013	Polly	Quinnell
10091	Elliot	Green
10213	Laura	Short
10251	Roger	Harris
10317	Philippa	Hayman
10351	Gemma	Stace
10353	Liz	Perry

example01 - Cr

File Home Create External Data Database Tools Acrobat

Views Themes Grouping & Totals

All Access Objects

Tables

students

Queries

Query1

Forms

students

Reports

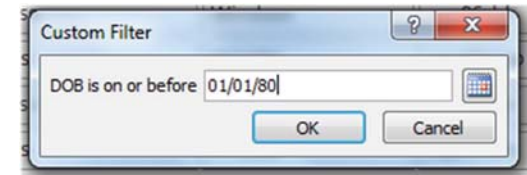
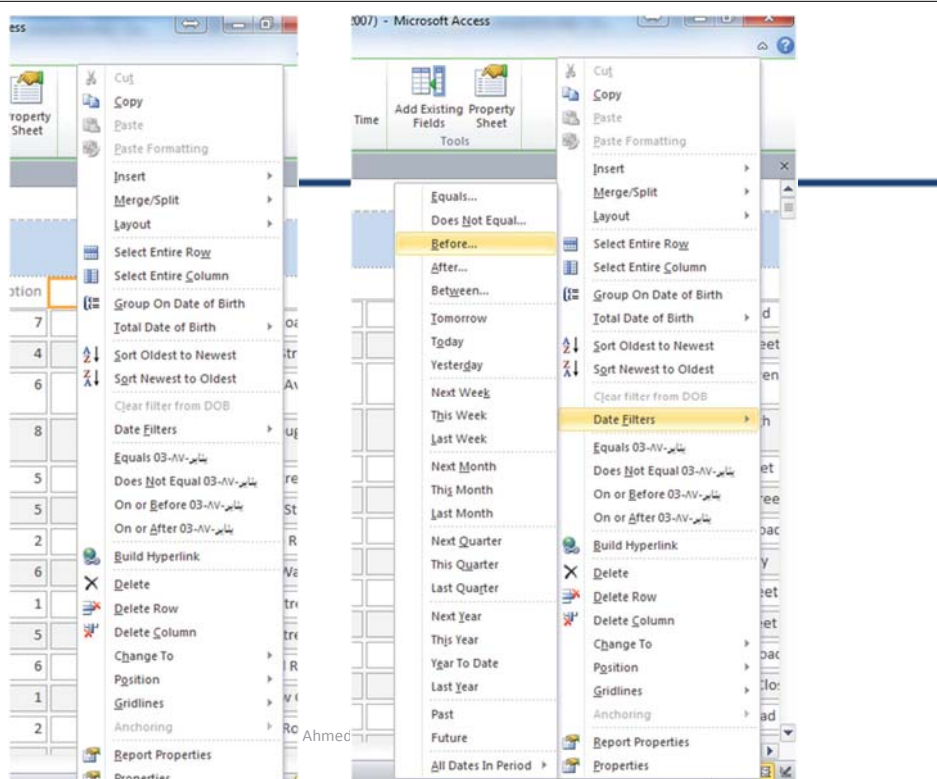
students

students1

students

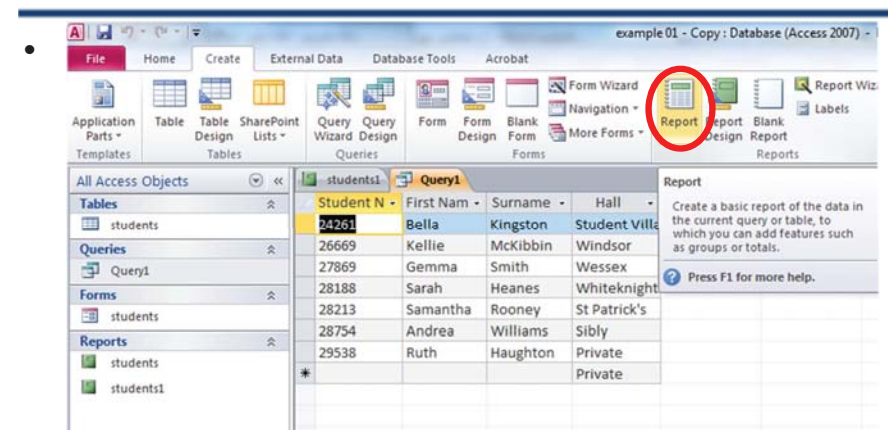
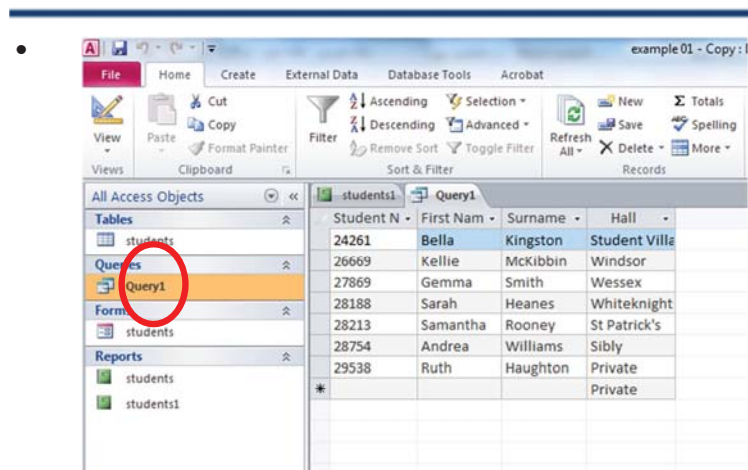
Student Number First Name Surname

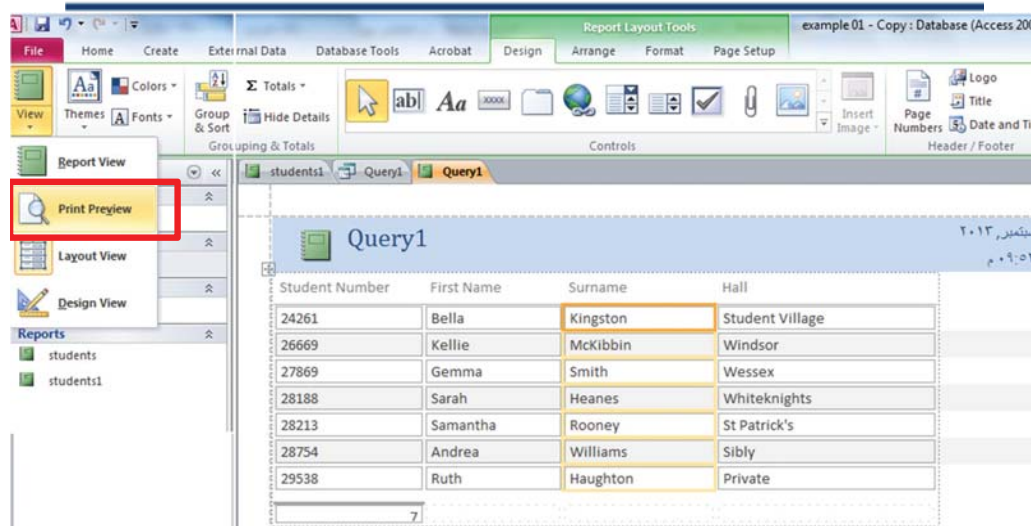
10012	David	Brachen
10013	Polly	Quinnell
10091	Elliot	Green
10213	Laura	Short
10251	Roger	Harris
10317	Philippa	Hayman



students ١١ سبتمبر ٢٠١٣ ٠٩:٤٣:٥٢

Student Number	First Name	Surname	Title	Hall	Userid	Tutor	Option	Date of Birth
10703	Linda	O'Sullivan	Miss	St George's	squ06fro	Matthews	2	١٨ مايو ٦٥
13190	Sarah	Little	Miss	Windsor	squ06shl	Clarke	9	٠٨ أغسطس ٦٣
14553	Mary	Parrott	Mrs	Private	squ06mgp	Spencer	1	٢٢ نوفمبر ٧٩
18926	Sarah	Salmon	Miss	Private	squ07svs	Hunt	3	١٦ أكتوبر ٧١
19581	Anna	Sanderson	Mrs	Private	squ07ads	Dixon	8	٠٣ ديسمبر ٧٦
21504	Hugo	Jerome	Mr	Private	squ07hlj	Hall	9	١٤ نوفمبر ٧٢
23509	Emily	Walker	Mrs	Private	squ08ehw	Williams	5	١٩ يوليو ٦٧





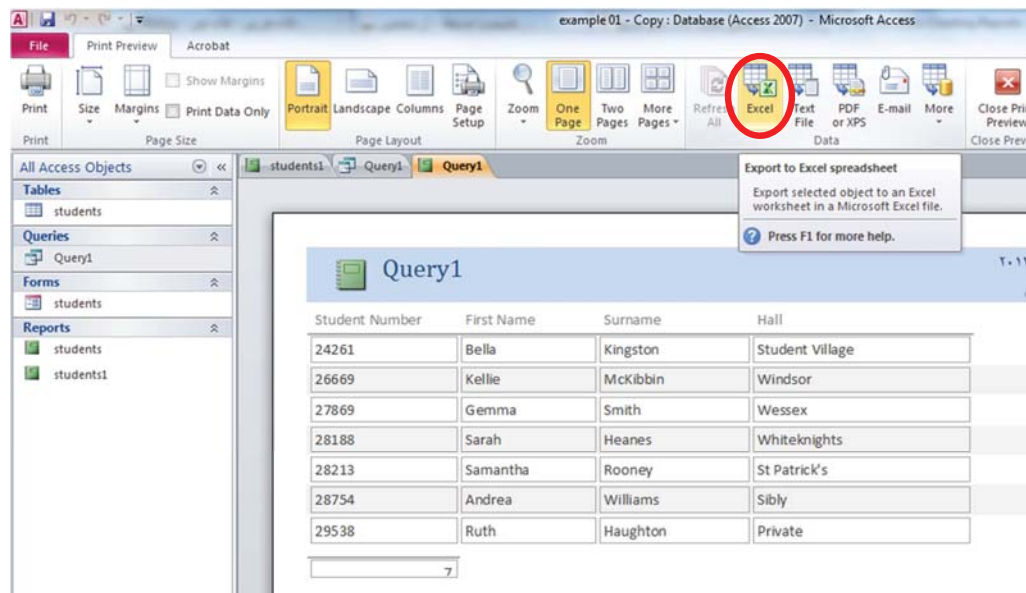
١٣

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I



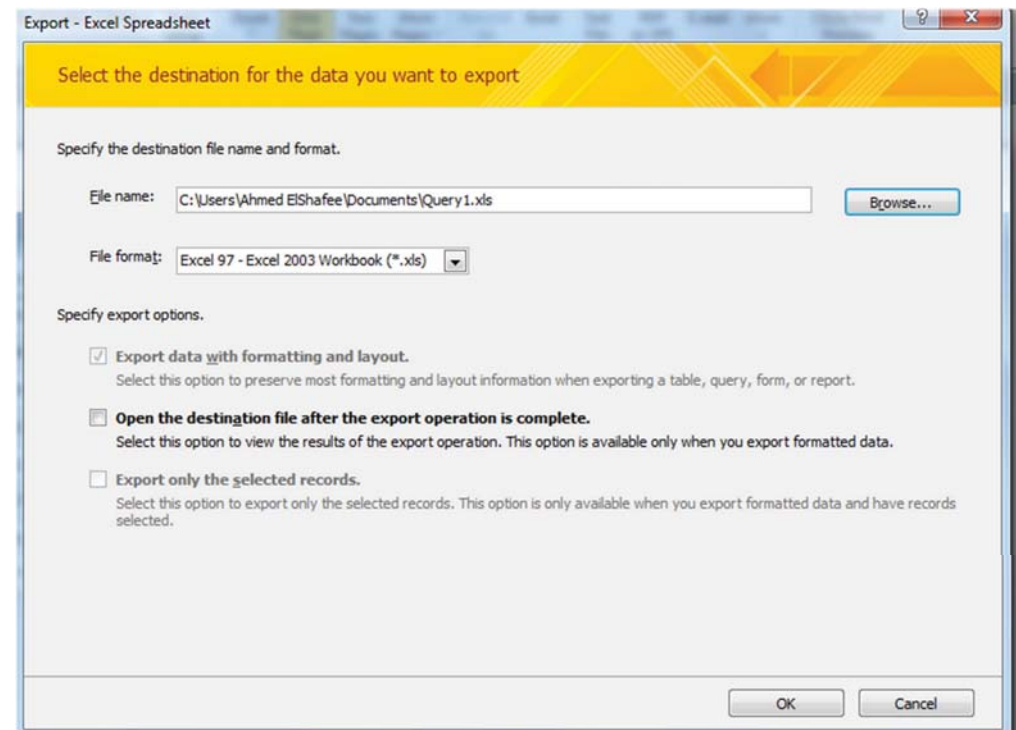
١٤

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I



١٥

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

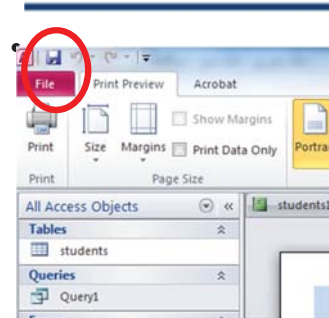


Query1.xls [Compatibility Mode] - Microsoft Excel

	A	B	C
1			
2	StudentNo	41528	0.913310185
3	24261	FirstName	Surname
4	26669	Bella	Kingston
5	27869	Kellie	McKibbin
6	28188	Gemma	Smith
7	28213	Sarah	Heanes
8	28754	Samantha	Rooney
9	29538	Andrea	Williams
10		Ruth	Haughton

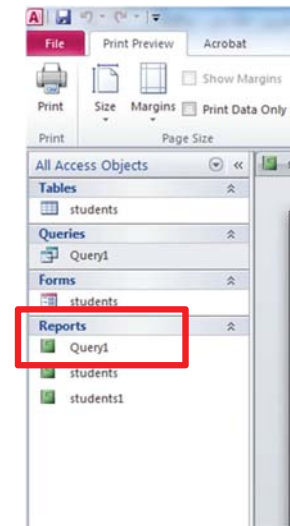
١٧

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I

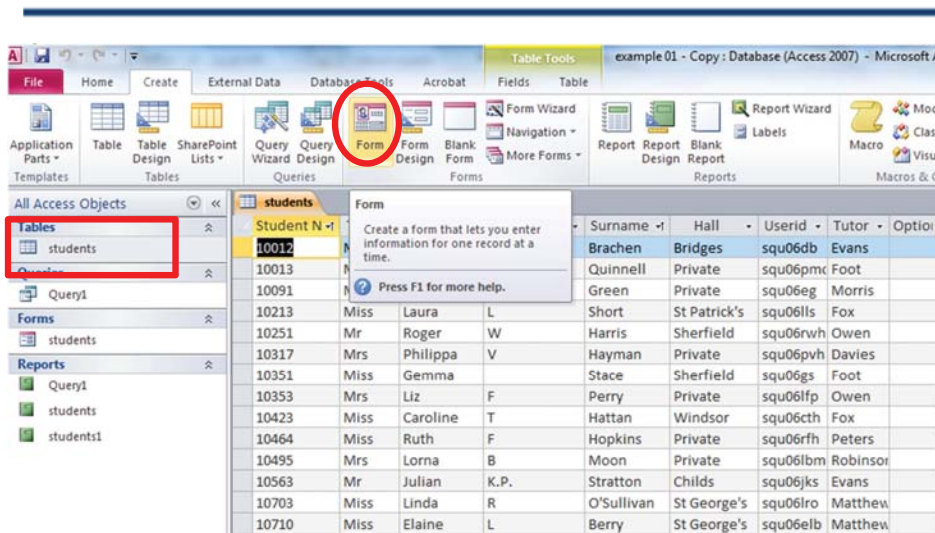


١٨

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I



Forms



١٩

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I

example 01 - Copy : Database (Access 2007) - Microsoft Access

Form Layout Tools: Design, Arrange, Format

students1

Student Number: 10012

Surname: Brachen

Title: Mr

First Name: David

Other Initials:

Hall: Bridges

Userid: squ06db

Tutor: Evans

Option: 7

Date of Birth: ٨٧ - ٠٣

Street: 52 Jubilee Road

Town: Birmingham

PostCode: B11 5FN

Phone: 0121-720156

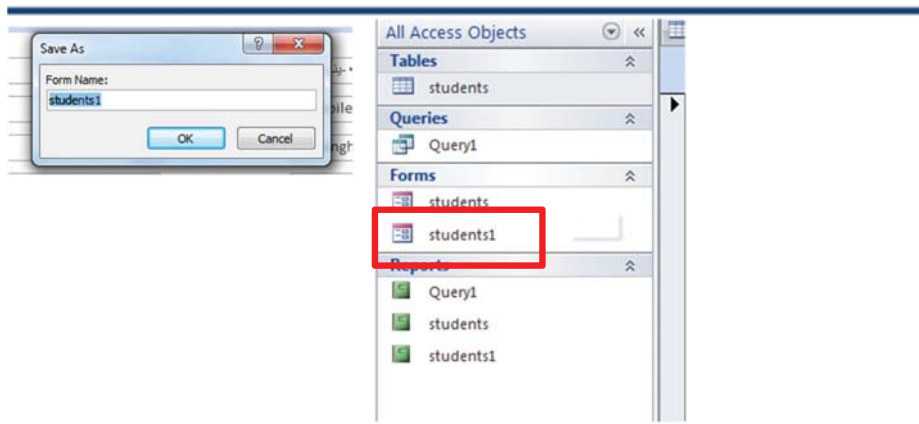
Overseas: ☐

Notes:

Photograph:

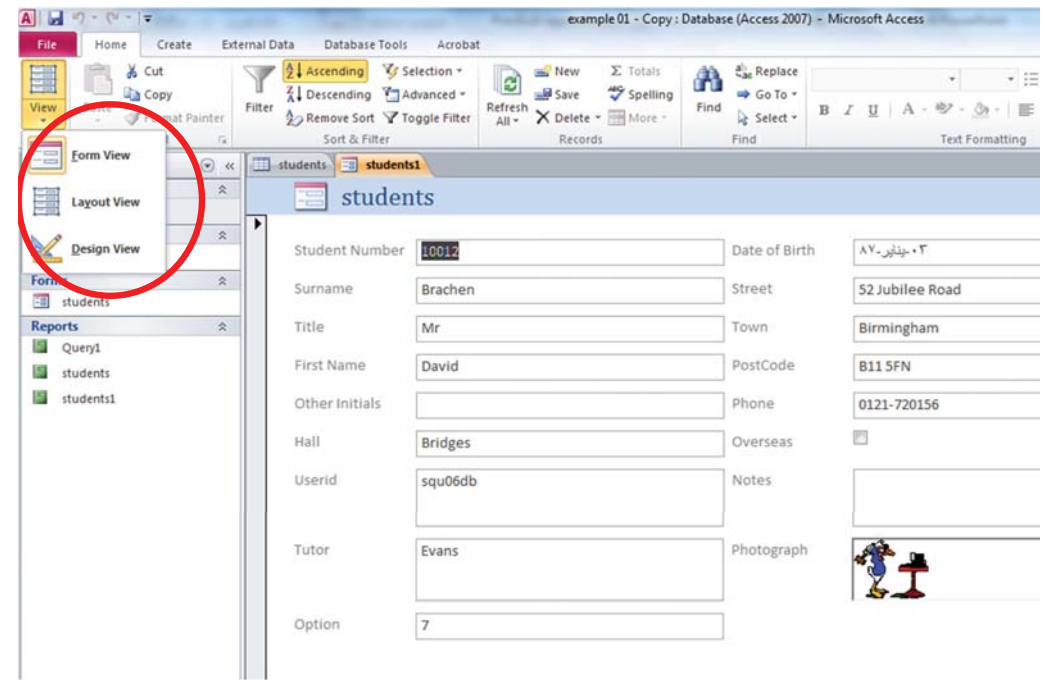
٢٠

in CS I



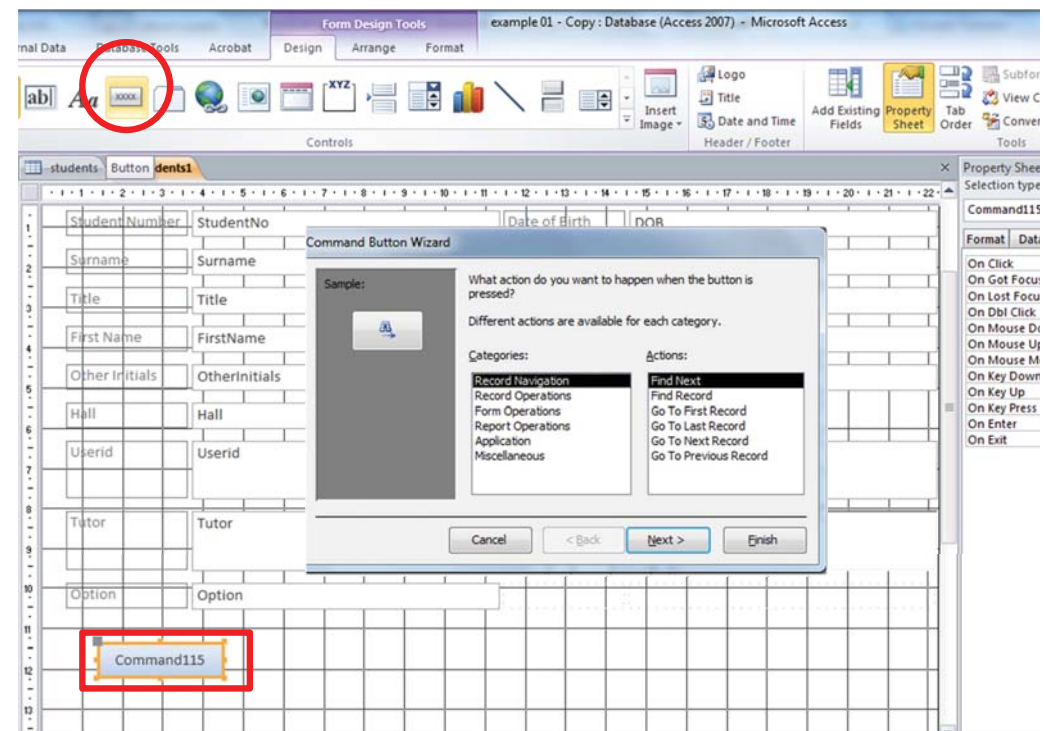
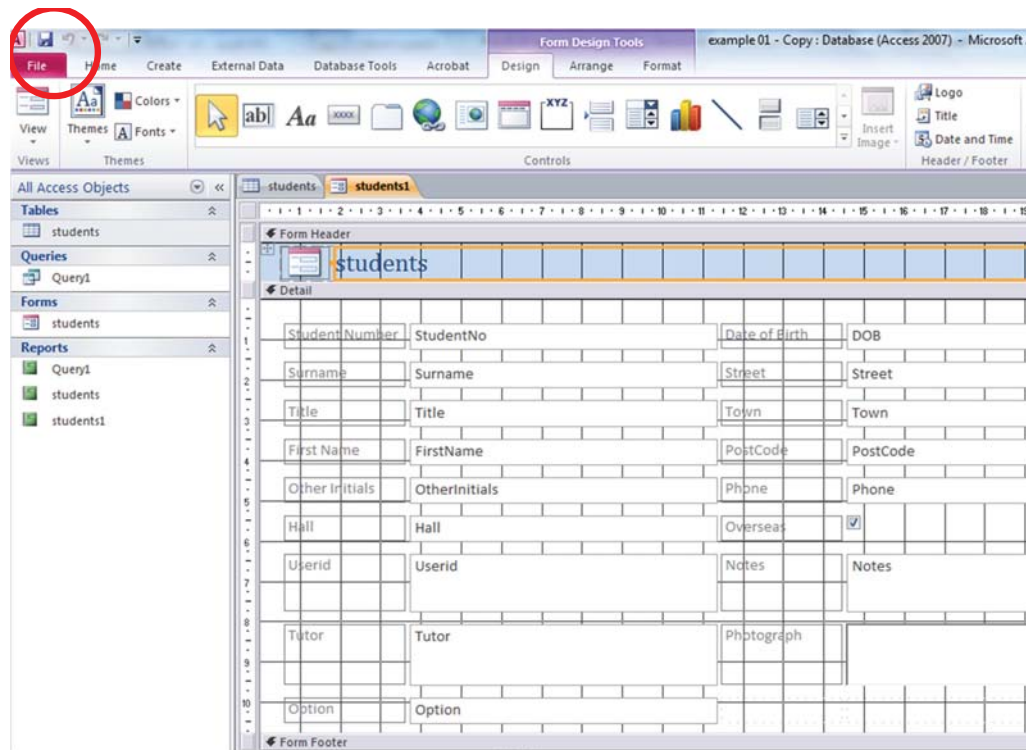
٢١

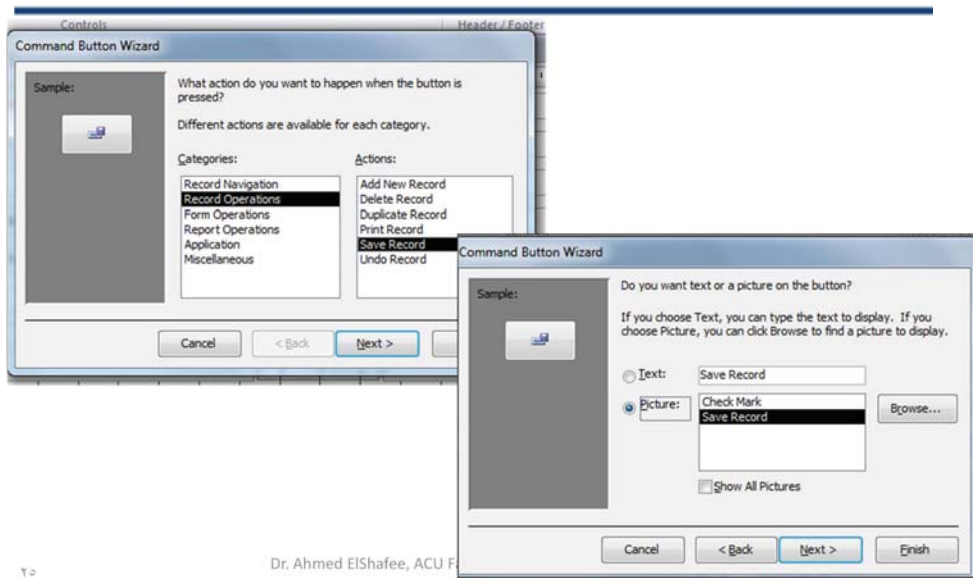
Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I



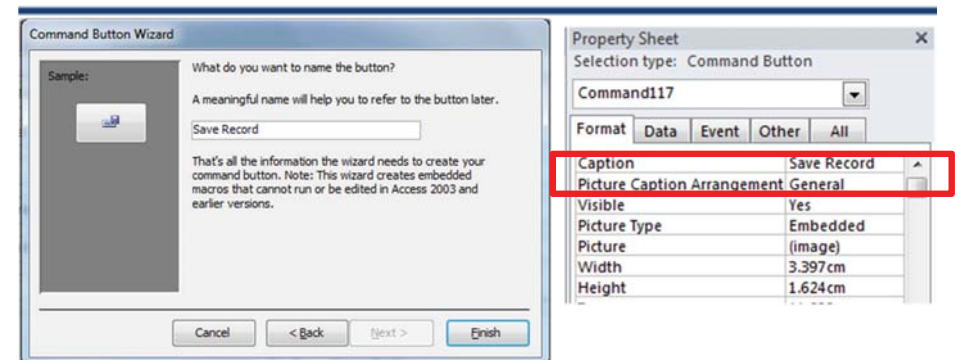
٢٢

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I





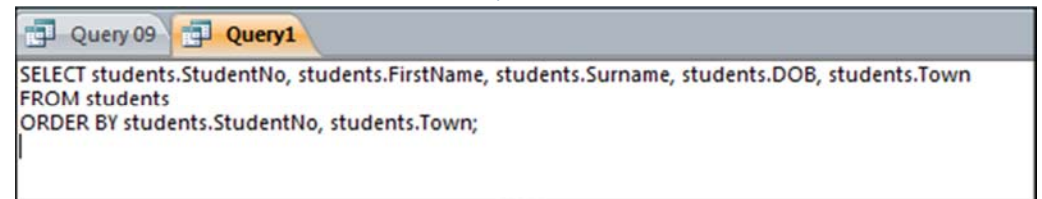
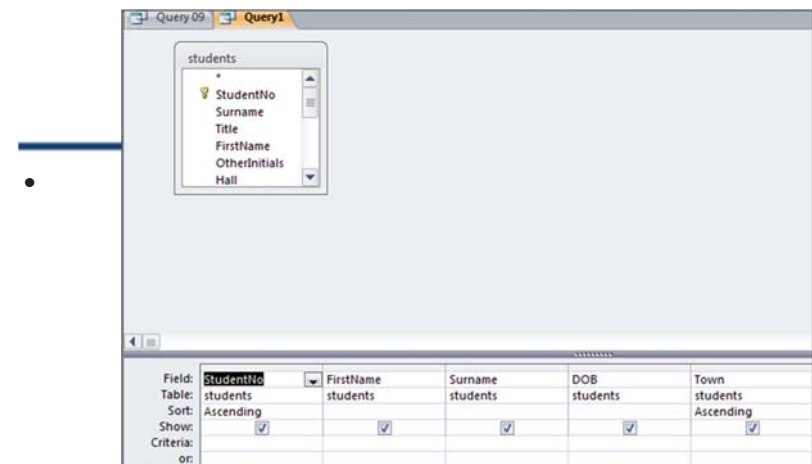
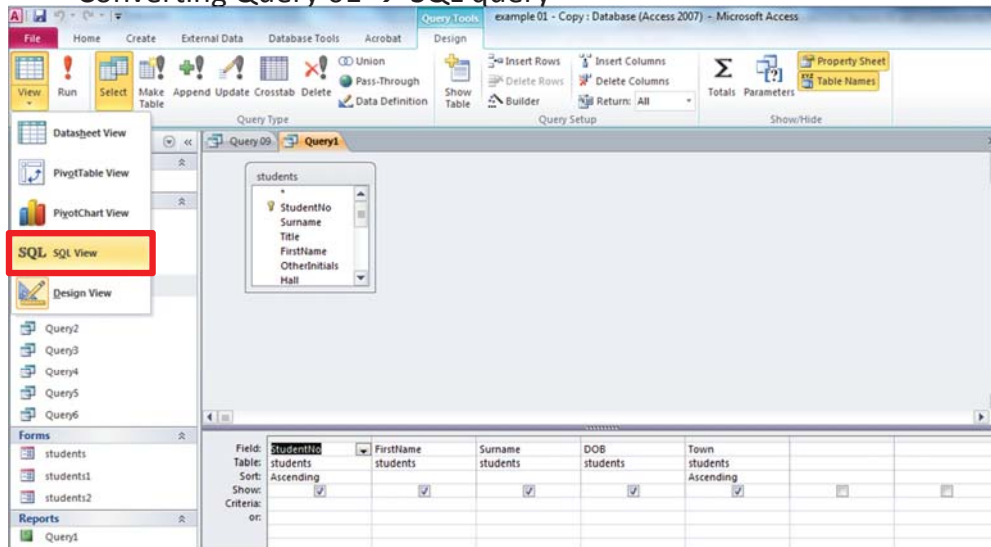
Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I



Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

SQL Queries

- Converting Query 01 → SQL query



Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications in CS I

Converting Query 02 → SQL query

students

- StudentNo
- Surname
- Title
- FirstName
- OtherInitials
- Hall

Field:	StudentNo	FirstName	Surname	DOB	Town
Table:	students	students	students	students	students
Sort:	Ascending				Ascending
Show:	☒	☒	☒	☒	☒
Criteria:				> #01/01/1985#	

```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.DOB)>#1/1/1985#))
ORDER BY students.StudentNo, students.Town;
```

Converting Query 03 → SQL query

students

- StudentNo
- Surname
- Title
- FirstName
- OtherInitials
- Hall

Field:	StudentNo	FirstName	Surname	DOB	Town
Table:	students	students	students	students	students
Sort:					
Show:	☒	☒	☒	☒	☒
Criteria:				< #01/01/1985#	

```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.DOB)<#1/1/1985#));
```

Converting Query 04 → SQL query

students

- StudentNo
- Surname
- Title
- FirstName
- OtherInitials
- Hall

Field:	StudentNo	FirstName	Surname	DOB	Town
Table:	students	students	students	students	students
Sort:	Ascending				Ascending
Show:	☒	☒	☒	☒	☒
Criteria:				> #01/01/1985# And <	

```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.DOB)>#1/1/1985# And (students.DOB)<#12/31/1985#))
ORDER BY students.StudentNo, students.Town;
```

Converting Query 05 → SQL query

students

- StudentNo
- Surname
- Title
- FirstName
- OtherInitials
- Hall

Field:	StudentNo	FirstName	Surname	DOB	Town
Table:	students	students	students	students	students
Sort:	Ascending				Ascending
Show:	☒	☒	☒	☒	☒
Criteria:				> #01/01/1985# And <	"London"

```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.DOB)>#1/1/1985# And (students.DOB)<#12/31/1985#) AND ((students.Town)="London"))
ORDER BY students.StudentNo, students.Town;
```

Converting Query 06 → SQL query

Field:	Table:	Sort:	Show:	Criteria:
StudentNo	students	Ascending	☒	Like *08*
FirstName	students	Ascending	☒	
Surname	students	Ascending	☒	
DOB	students	Ascending	☒	
Town	students	Ascending	☒	
Userid	students	Ascending	☒	Like *08*



```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.Userid) Like "*08*"))
ORDER BY students.StudentNo, students.Town;
```

Converting Query 07 → SQL query

Field:	Table:	Sort:	Show:	Criteria:
StudentNo	students	Ascending	☒	Like *08*
FirstName	students	Ascending	☒	
Surname	students	Ascending	☒	
DOB	students	Ascending	☒	
Town	students	Ascending	☒	
Userid	students	Ascending	☒	Like *08*



```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.Userid) Like "*08*"))
ORDER BY students.StudentNo, students.Town;
```

Converting Query 08 → SQL query

Field:	Table:	Sort:	Show:	Criteria:
StudentNo	students	Ascending	☒	
FirstName	students	Ascending	☒	
Surname	students	Ascending	☒	
DOB	students	Ascending	☒	>#01/01/1985# And <#12/31/1985#
Town	students	Ascending	☒	
Userid	students	Ascending	☒	Like *08*



```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.DOB) > #1/1/1985# And (students.DOB) < #12/31/1985#) AND ((students.Userid) Like "*08*"))
ORDER BY students.StudentNo, students.Town;
```

in CS I

Converting Query 09 → SQL query

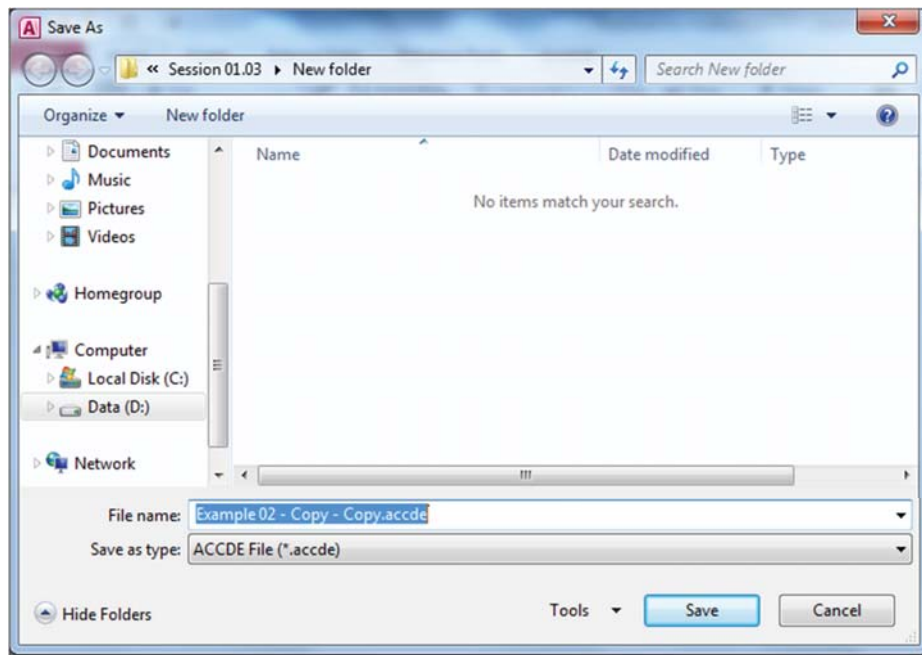
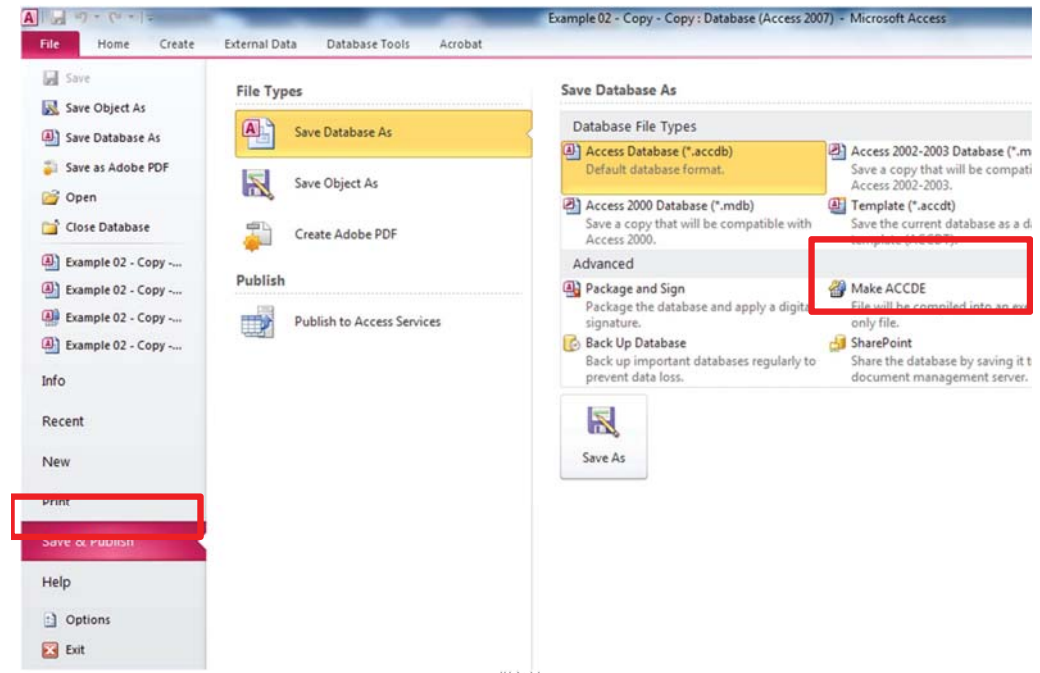
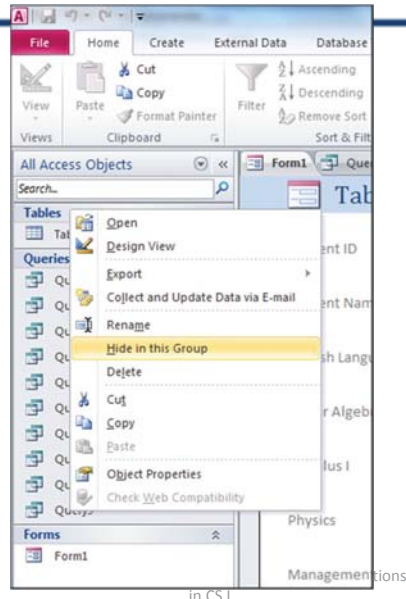
Field:	Table:	Sort:	Show:	Criteria:
StudentNo	students	Ascending	☒	
FirstName	students	Ascending	☒	
Surname	students	Ascending	☒	
DOB	students	Ascending	☒	
Town	students	Ascending	☒	
Userid	students	Ascending	☒	Like *08*
Tutor	students	Ascending	☒	= "Fox"



```
SELECT students.StudentNo, students.FirstName, students.Surname, students.DOB, students.Town
FROM students
WHERE (((students.Userid) Like "*08*") AND ((students.Tutor) = "Fox"))
ORDER BY students.StudentNo, students.Town;
```

in CS I

Publishing your work



Assignment

- Create report displays students and their courses result
- Create report displays students and their CH, GPA
- Create a form to display and student results.
- Add the following buttons
 - Add record
 - Save record
 - Delete record
 - Find record
 - Next record
 - Last record
- Build executable database (contains only forms and reports)

Example02 - Copy - Copy Database (Access 2007) - Microsoft Access

Table1

Student ID	6121001	Fundamentals of Programming I	A-
Student Name	Amr Ayman Mohamed	Discrete Math	A
English Language I	A-	Calculus II	A
Linear Algebra I	A	Introduction to Computer Science	A
Calculus I	A	Critical ,Creative Thinking	
Physics	A	English Language II	B+
Management	A-	CH	36
Presentation and Communication Skills	A-	GPA	3.84166666666667
Electronics	A		

<< Previous Record Next Record >>

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I

Table1

Student ID	6121001	Fundamentals of Programming I	A-
Student Name	Amr Ayman Mohamed	Discrete Math	A
English Language I	A-	Calculus II	A
Linear Algebra I	A	Introduction to Computer Science	A
Calculus I	A	Critical ,Creative Thinking	
Physics	A	English Language II	B+
Management	A-	CH	36
Presentation and Communication Skills	A-	GPA	3.84166666666667
Electronics	A		

<< Previous Record Next Record >>

Find Record Save Record Add Record Delete Record

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I

Thanks,..
See you next week (ISA),...

Dr. Ahmed ElShafee, ACU Fall 2013, Practical Applications
in CS I