



**Why don't we just
use Excel?**



QA Consider a very small family business, an English as a Foreign Language school

- Martina Jenkins, the owner
- Simon Jenkins, her husband
- Lorraine Jenkins, Simon's sister
- Lucy Young, a graduate they know



	A	B	C	D	
1	Firstname	Surname	Role	Salary	
2	Martina	Jenkins	Director of Studies	23000	
3	Simon	Jenkins	Teacher	21000	
4	Lorraine	Jenkins	Teacher	18000	
5	Lucy	Young	Receptionist	16000	
6					



Firstname	Surname	Role	Salary
Martina	Jenkins	Director of Studies	23000
Simon	Jenkins	Teacher	21000
Lorraine	Jenkins	Teacher	18000
Lucy	Young	Receptionist	16000
James	Sunderland	Teacher	19000
Angela	Orosco	Teacher	19000
Eddie	Dumbrowski	Teacher	18000



Firstname	Surname	Role	Salary	Car Reg
Martina	Jenkins	DoS	23000	PK44TUL
Simon	Jenkins	Teacher	21000	
Lorraine	Jenkins	Teacher	18000	ZZ9PZA
Lucy	Young	Recept'n	16000	
James	Sunderland	Teacher	19000	XY21ONO
Angela	Orosco	Teacher	19000	QQ34BBB
Eddie	Dumbrowski	Teacher	18000	JJ66CUP
Walter	Sullivan	Warden	15000	SA33USB



James	Sunderland	Teacher	19000	XY21ONO
Angela	Orosco	Teacher	19000	QQ34BBB
Eddie	Dumbrowski	Teacher	18000	1166C1ID



Lucy	Young	Recept'n	16000	
James	Sunderland	Teacher	19000	XY21ONO
James	Sunderland	Teacher	19000	AA11777
Angela	Orosco	Teacher	19000	OO34RRR



Firstname	Surname	Role	Salary	Car Reg
James	Sunderland	Teacher	19000	AA11777
Eddie	Dumbrowski	Teacher	18000	JJ66CUP
Martina	Jenkins	DoS	23000	PK44TUL
Angela	Orosco	Teacher	19000	QQ34BBB
Walter	Sullivan	Warden	15000	SA33USB
James	Sunderland	Teacher	19000	XY21ONO
Lorraine	Jenkins	Teacher	18000	ZZ9PZA
Simon	Jenkins	Teacher	21000	
Lucy	Young	Recept'n	16000	



Firstname	Surname	Role	Salary	Car Reg
James	Sunderland	Teacher	20000	AA11777
Eddie	Dumbrowski	Teacher	18000	JJ66CUP
Martina	Jenkins	DoS	23000	PK44TUL
Angela	Orosco	Teacher	19000	QQ34BBB
Walter	Sullivan	Warden	15000	SA33USB
James	Sunderland	Teacher	19000	XY21ONO
Lorraine	Jenkins	Teacher	18000	ZZ9PZA
Simon	Jenkins	Teacher	21000	
Lucy	Young	Recept'n	16000	

Other possible problems

- The spreadsheet might include a phone number and an address, all of which can be accessed by Walter.
- In the interest of Equal Opportunity & Diversity, some personal information might also be included. Again, accessible to Walter...
- Duplicate names may arise, e.g., another Simon Jenkins might join the company.

Relational Database Management System

- These problems may be solved using a relational database management system (RDBMS) instead of a spreadsheet.
- Employee details and car details are put in separate tables – Employees, Cars.

QA Employees

EmpID	Firstname	Surname	Role	Salary
E001	Martina	Jenkins	DoS	23000.0000
E002	Simon	Jenkins	Teacher	21000.0000
E003	Lorraine	Jenkins	Teacher	18000.0000
E004	Lucy	Young	Receptionist	16000.0000
E005	James	Sunderland	Teacher	20000.0000
E006	Angela	Orosco	Teacher	19000.0000
E007	Eddie	Dumbrowski	Teacher	18000.0000
E008	Walter	Sullivan	Warden	15000.0000
E009	Simon	Jenkins	Accommod...	<u>17000.0000</u>

RegNo	Colour	Make	EmplID
AA11777	Blue	Audi	E005
JJ66CUP	Silver	Citroen	E007
PK44TUL	Red	Mercedes	E001
QQ34BBB	Blue	Ford	E006
SA33USB	White	Seat	E008
XY21ONO	Blue	Ford	E005
ZZ9PZA	Red	Audi	E003