

# EDDI implements ISBL as a 'definitive notation'

```
%eddi
```

```
allfruits (name CHAR, begin INT, end INT);  
allfruits << ["granny",8,10],["lemon",5,12],["kiwi",5,6],["passion",5,7];  
allfruits << ["orange",4,11],["grape",3,6],["lime",4,7],["pear",4,8];  
  
apple (name CHAR, price REAL, qnt INT);  
apple << ["cox",0.20,8],["red",0.35,4],["granny",0.25,20];  
  
citrus (name CHAR, price REAL, qnt INT);  
citrus << ["lime",0.30,3],["orange",0.55,8],["kiwi",0.75,5],["lemon",0.50,2];  
  
soldfruit (name CHAR, unitsold INT);  
soldfruit << ["cox",100],["granny",153],["red",70];  
soldfruit << ["kiwi",23],["lime",15],["lemon",55],["orange",78];  
  
fruits is allfruits % name;  
popcitrus is (fruits.citrus % name).(soldfruit : unitsold > 50 % name);  
nonapplesncox = allfruits-(allfruits*apple%name,begin,end)+allfruits:name=="cox";
```

**EDDI - base for teaching environment used at Warwick over 4 years:  
approximately 300 computing-based 2nd year students each year**

**Illustrate a simplified version in this talk ...**

# The SQLEDDI environment

tkeden 1.46: Input

File Edit View Help

Accept • %eddi • %sqlzero • %sqlte

Enter %eddi statements:

Output from queries

## THE UNEDDIFYING INTERFACE

	YES	NO
Eliminates duplicate rows	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Typechecks on attributes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Use natural join	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## EXAMPLE QUERIES

```
?apple % name + allfruits % name;
```

```
?apple % name, qnt + citrus % name,
```

```
?allfruits % name, begin + apple %  
name, qnt;
```

```
?allfruits * apple;
```

```
(SELECT name FROM apple) UNION (SELECT  
name FROM allfruits);
```

```
(SELECT name, begin FROM allfruits)  
UNION (SELECT name, qnt FROM apple);
```

```
SELECT * FROM allfruits, apple;
```

# The Temposcope

Tkeden(server): Input Window

File View Type Accept Send Help Interrupt

Enter EDEN Statements:

```
WMB_AV = [9,10,11,12,19,20,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90];
```

Staff	DA	AB	SBR	YM	MCK	MSJ	SK	AT	SGM	MAR	Rooms	104	327	Message Board	*** Availabil:
AM	RGW	RSL	GRM	MSP	JES	TJA	GRN	WMB	RAP		313	LL1		*** Availabil:	
RN	PWG	NONE	MLe	SAJ	DJKTJ	TJADJ	KH	DJK	LAG		007	444		*** Availabil:	
THEC															
Slots	9:00-9:40	9:40-10:20	10:20-11:00	11:00-11:40	11:40-12:20	12:20-1:00	1:00-1:40	1:40-2:20	2:20-3:00	3:00-3:40	3:				
Mon Slots 1-13	Ash Joh 313 Bowes C 327 Nuttall 104	Barrett 313 Habgood 327	Banks G 313 Ottner 327	Dhanjal 104 Payne C 327	Denny N 313	Atkinso 313 Fraser 327	Loo Jia 313	Edwards 313	Francis 313 Salmon 327	Hinds S 104 Park Hy 313 Berryma 327	104	327			
Tue Slots 14-26	Baty Si 327 Guy Nei 313 Campbel 444	Knights 313 Butler 327	Cairns 104 O'Leary 313 Holdsw 327	Harriso 313 Magson 327	Brown C 313 Lumb Si 327	Howard 327	De Nies 104 Jordano 313 Hines A 327	Sharp D 313 Chan Ma 327	Hull Si 313 Sanare 327	McCorma 313 Pe					
Wed Slots 27-39	Chamber 327 Tailor 444	Laveric 313	Johnsto 104 Keeble 313 Njo And 327	Jenkins 313 Macderm 104 Kneller 327	Bang Su 104 Scruby 313 Milner 327	Clarke 327 Tebbutt 313	Tucker 313 Ng Edwi 104 Tordoff 327	Moissee 327 Yeoh Ch 313	Hogbin 327						
Thur Slots 40-52	Smith D 313 Carley 327 Roberts 104	Lee Y K 313 Garnham 327	Ong Sie 104 Edwards 327	Pearce 104 Beavan 313 Thomas 327	Anand A 327 Pang Ch 313 Lau Yan 444	Elding 327 Wells J 313	Brandon 313 Pinkney 327	Birch H 327	Fergus 327	Shepher 313 Watson 327					
Fri Slots 53-65	Burnett 313 Ross Ph 327	Hainswo 327 Blayloc 444 Hamren- 313	Maher T 313 Hawton 327	Brownin 313 Tang Wi 327			Beatham 007 Keen Ch 327		Eveleig 327	Giles N 313 Ca					

  

Functions	Al-Khaburi	Ali Anand	Aradhana	Ash John	T F	Atkinson	Paul	Bang Sung	G	Banks	Geoffrey	Barrett	Ian R	Batv	Simon M	Be
New TT	Berryma	Birch	Helen E	Blaylock	Bodsworth	Boot	Andrew J	Bowes	Brandon	Robin	Brown	Chan	Man Yi	Clarke	Adrian	Co
SaveAll	Butler	James	Cairns	George	Cambell	Zoe E	Carlev	Simon	Caudle	Richard	Chambers	Chan	Man Yi	Clarke	Adrian	Co
LoadAll	Dennv	Nicholas	Dhanjal	Avnash	Edwards	Gavin	Edwards	Paul	MEdvvean	Lowena	Elding	Daniel	Evans	Simon	R	Eveleigh
LoadTT	Fraser	Thomas	Garrham	Sam	Giles	Nicholas	Goudoe	Matthew	Guv	Neil	Habood	Chloe	Hainsworth	Hamren-Larsson	Ha	
	Hinds	Hines	Anthony	Hoochin	Paul E	Holdsworth	Howard	Paul	Hull	Simon R	Hunter	Andrew	Hussain	Bibi	Je	
	Jordanous	Anna	Kamali	Russell	Keeble	Paul R	Keen	Kneller	Knights	Lau	Yan Chi	Laverick	L			
	Loo	Jian S	Lumb	Simon A	Macdermott	Magson	Daniel	Maher	Thomas	J	McCormack	Milner	John D	Moisseenkov	Mc	
	Nio	Andv	Nuttall	Alex	O'Connor	Mark	O'Leary	Ono	Siew P	Ottner	Morag	Pang	Chee M	Park	Hvouna	K
	Pearce	Sarah L	Pinknev	Colin	Roberts	Rogers	Claire	Ross	Philip	S	Rowe	Salmon	Sanare	Sc		
	Seved	Sajjadi	Sharp	David P	Shepherd	David	Smith	Duncan	A	Souibb	Jamie	P	Taylor	Vijav	P	Tang
	Thomas	Iain W	Tordoff	Tucker	Walker	Robert	Watson	Russell	Wells	John A	Weston	David	J	Wicks	Colin	A