

SQL3 Discussion paper Draft: 12/15/93 24437new.fmk**Title: Tuples vs. Records****Author: William Kent****Status: Discussion paper****References:**

- 1 X3H2-93-359R/ISO DBL MUN-003, (*ISO-ANSI Working Draft*) *Database Language SQL (SQL3)*, Jim Melton (ed.), August 1993.
- 2 X3H2-93-437Rev1, "Record Types", Krishna Kulkarni, Jim Melton and Nelson Mattos, Oct. 25 1993.
- 3 X3H2-93-557, "Row types and domains", David Beech and Phil Shaw, Nov. 29 1993.

GET MYREFS ON TUPLE TYPES.

DO WE NEED ANY OF THE FOLLOWING?

- 4 X3H2-93-368R1, "Implementation Hiding", William Kent, Nov. 17, 1993.
- 5 X3H2-93-076, "SQL3 OO Underlying Assumptions", William Kent. DATE?
- 6 X3H2-93-109, "Identity and Equality", William Kent and Amelia Carlson. DATE?
- 7 X3H2-93-234, "POINTS TO and CONTAINS", David Beech, Boris Burshteyn and Phil Shaw, May 1 1993.
- 8 X3H2-93-384R, "Extents for object ADTs", John Bellemore, Tim Nguyen, Gray Clossman and Phil Shaw, Sept 10 1993.

1 Introduction

Notes...

This paper compares an alternative, which we will here call tuple types, with the record types as proposed in [2]. The objective is to demonstrate that tuple types are simpler than record types.

The principal differences are:

- Tuple types do not involve attribute names. Attribute names continue to be associated with tables as column names.
- Tuple types exist as parameterized types, much like collection types, without having to be created.

Most other aspects of [2] are unchanged. In particular, it is proposed here that distinct types can be defined from tuple types, making it possible to refer to such types by name. (It might also be useful to consider a simple alias facility, which would give such a type a name without creating a distinct type.)

Associate column names with tables.

For variables, consider declaring a variable to be X LIKE TABLE T (or X FOR TUPLES LIKE TABLE T). That would give the variable X the same column names as table T.