

Suppose that you are going to lay out the data storage for the relation shown at right. Assume that the disk blocks are just 32 bytes long, as represented by the lines at the bottom of this page. How would the data be stored, given the following policies?

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- Variable-length fields appear after all the fixed-length fields. Each (except the last) begins with one byte giving the length of the data portion.
- There are no spanned records. Extra space at the end of a block is left unused, and filled with zeros.

```
CREATE TABLE DogLicenses(name VARCHAR, licenseNo
    INTEGER, rabiesVac BOOLEAN, expires CHAR(3));
```

| Name | licenseNo | rabiesVac | expires |
|---------|-----------|-----------|---------|
| Adiko | 1001 | Y | OCT |
| Butch | 1002 | Y | JAN |
| Caro | 1003 | Y | MAR |
| Daiki | 1004 | Y | MAR |
| Eduardo | 1005 | Y | DEC |
| Fido | 1006 | N | AUG |
| Rover | 1007 | Y | FEB |
| Spuds | 1008 | N | JUL |
| Tiifu | 1009 | Y | SEP |

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| 15 | 1 | 0 | 0 | 1 | Y | O | C | T | 5 | A | d | i | k | o | 15 | 1 | 0 | 0 | 2 | Y | J | A | N | 5 | B | u | t | c | h | 0 | 0 |
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| 15 | 1 | 0 | 0 | 4 | Y | M | A | R | 5 | D | a | i | k | i | 17 | 1 | 0 | 0 | 5 | Y | D | E | C | 7 | E | d | u | a | r | d | o |
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| 14 | 1 | 0 | 0 | 6 | N | A | U | G | 4 | F | i | d | o | 13 | 1 | 0 | 0 | 7 | Y | F | E | B | 3 | R | e | y | 0 | 0 | 0 | 0 | 0 |
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| 14 | 1 | 0 | 0 | 8 | N | J | U | L | 4 | S | p | o | t | 15 | 1 | 0 | 0 | 9 | Y | S | E | P | 5 | T | i | i | f | u | 0 | 0 | 0 |
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| 1 | 0 | 1 | 0 | 0 | 1 | Y | O | C | T | 1 | 1 | 1 | 0 | 0 | 2 | Y | J | A | N | 1 | 2 | 1 | 0 | 0 | 3 | Y | M | A | R | 0 | 0 |
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| 27 | 22 | 18 | 13 | 6 | 0 | E | d | u | a | r | d | o | D | a | i | k | i | C | a | r | o | B | u | t | c | h | A | d | i | k | 0 |
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| 1 | 3 | 1 | 0 | 0 | 4 | Y | M | A | R | 1 | 4 | 1 | 0 | 0 | 5 | Y | D | E | C | 3 | 0 | 1 | 0 | 0 | 6 | N | A | U | G | 0 | 0 |
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| 28 | 23 | 18 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | T | i | i | f | u | S | p | u | d | s | R | o | v | e | r | F | i | d | o |
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| 3 | 1 | 1 | 0 | 0 | 7 | Y | F | E | B | 3 | 2 | 1 | 0 | 0 | 8 | N | J | U | L | 3 | 3 | 1 | 0 | 0 | 9 | Y | S | E | P | 0 | 0 |
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| Fido | 1006 | N | AUG |
| Rey | 1007 | Y | FEB |
| Spot | 1008 | N | JUL |
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| 15 | 1 | 0 | 0 | 1 | Y | O | C | T | 5 | A | d | i | k | o | 15 | 1 | 0 | 0 | 2 | Y | J | A | N | 5 | B | u | t | c | h | 0 | 0 |
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| 14 | 1 | 0 | 0 | 6 | N | A | U | G | 4 | F | i | d | o | 13 | 1 | 0 | 0 | 7 | Y | F | E | B | 3 | R | e | y | 0 | 0 | 0 | 0 | 0 |
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| 14 | 1 | 0 | 0 | 8 | N | J | U | L | 4 | S | p | o | t | 15 | 1 | 0 | 0 | 9 | Y | S | E | P | 5 | T | i | i | f | u | 0 | 0 | 0 |
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| 1 | 0 | 1 | 0 | 0 | 1 | Y | O | C | T | 1 | 1 | 1 | 0 | 0 | 2 | Y | J | A | N | 1 | 2 | 1 | 0 | 0 | 3 | Y | M | A | R | 0 | 0 |
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| 27 | 22 | 18 | 13 | 6 | 0 | E | d | u | a | r | d | o | D | a | i | k | i | C | a | r | o | B | u | t | c | h | A | d | i | k | 0 |
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| 28 | 23 | 18 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | T | i | i | f | u | S | p | u | d | s | R | o | v | e | r | F | i | d | o |
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