**diag0cnt() — Count zeros on diagonal**

### Description

`diag0cnt(X)` returns the number of principal diagonal elements of `X` that are 0.

### Syntax

```
real scalar diag0cnt(real matrix X)
```

### Remarks and examples

`diag0cnt()` is often used after `invsym()` (see [M-5] `invsym()`) to count the number of columns dropped because of collinearity.

### Conformability

`diag0cnt(X):`

- **X**: \( r \times c \)
- **result**: \( 1 \times 1 \)

### Diagnostics

`diag0cnt(X)` returns 0 if `X` is void.

### Also see

- [M-5] `invsym()` — Symmetric real matrix inversion
- [M-4] `Utility` — Matrix utility functions