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Vector Product of Two 3-Vectors

Subroutine subprogram `CROSS` computes the vector (or cross) product

$$\mathbf{c} = \mathbf{a} \times \mathbf{b}$$

of two 3-vectors $\mathbf{a}$, $\mathbf{b}$.

Structure:

`SUBROUTINE` subprogram
User Entry Names: `CROSS`
`COMMON` Block Names and Lengths: `/SLATE/ 40`

Usage:

```
CALL CROSS(A,B,C)
```

`A,B` (`REAL`) One-dimensional arrays of length 3, containing the components (a_1, a_2, a_3), (b_1, b_2, b_3), respectively.

`C` (`REAL`) On exit, `C` contains the components (c_1, c_2, c_3) of $\mathbf{a} \times \mathbf{b}$, i.e.

$c_1 = a_2 b_3 - a_3 b_2$

$c_2 = a_3 b_1 - a_1 b_3$

$c_3 = a_1 b_2 - a_2 b_1$.

`C` may overlap either `A` or `B`.

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