Iterative double factorial

Write an iterative function that returns the double factorial \( n!! \) for a natural \( n \).

Recall that \( n!! = n \times (n - 2) \times (n - 4) \times \ldots \). For instance, \( 9!! = 9 \times 7 \times 5 \times 3 \times 1 = 945 \) and \( 8!! = 8 \times 6 \times 4 \times 2 = 384 \). By definition, \( 0!! = 1!! = 1 \).

**Interface**

- C++:
  ```cpp
  int double_factorial (int x);
  ```

- Java:
  ```java
  public static int doubleFactorial (int x);
  ```

- Python:
  ```python
  double_factorial (x) # returns int
double_factorial (x: int) → int
  ```

**Precondition**

Assume \( 0 \leq n \leq 19 \).

**Observation**

You only need to submit the required procedure; your main program will be ignored.

**Problem information**

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