ALGORITHM 84
SIMPSON'S INTEGRATION
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declare type real = float; integer n = 10;
array y[1:n] = [0.0, 1.0, 2.0, ..., 10.0];

begin
for i := 1 step 2 until n - 1 do
s := s + 2 * y[i] + y[i + 1];
SIM := SIM + (b - a) * s / (3 * n);
end

CERTIFICATION OF ALGORITHM 84
SIMPSON'S INTEGRATION [P. E. Hennion, Comm. ACM 5 (Apr. 1962)]
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Simpson's Integration was translated using the DEUCE ALGOL compiler and, with no corrections, gave satisfactory results. It is not stated in the comment that integer n needs to be even.

REMARK ON ALGORITHM 84
SIMPSON'S INTEGRATION [Paul E. Hennion, Comm. ACM, Apr. 1962]
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* Work supported by the U. S. Atomic Energy Commission.

In performing integration by the use of Simpson's rule, it is well known that the interval [a, b] must be divided evenly into n equal parts, and that it is essential for n to be an even number.

In the published algorithm, there is neither a comment on this important restriction, nor a programmed test for the parity of n. It is therefore a potential trap for the unwary programmer.