Errata for "Classical Fortran" first edition

page	corrections
front,15	Move BLOCK DATA above the line.
25	Change "footer" to "header" in line 12 up from the bottom of the page.
33	Change "vestage" to "vestige" in line 9 up from the bottom of the page.
65	Change "far away at statement 3" to "far away at statement 1" in line 8 down from the top of the page.
71	In Exercise 3.8.12, change the last sentence to "Which version of the code do you think is easier to understand?".
78	Replace lines 5,4,3 up from the bottom of the page with this text: "A floating-point number is said to be normalized when p > 0, or unnormalized when p = 0 and f is nonzero."
80	Replace the second sentence of Section 4.3 with this one: "Conversely, the decimal equivalent of a binary floating-point value might be truncated when it is written out using a fixed number of digits."
81	On lines 3,2 up from the bottom of the page, replace the beginning of the sentence with "On a decimal computer where the smallest representable value greater than zero is .001,"
99	In Exercise 4.10.8 delete (b) and make the first sentence "The bit pattern 10111101110000000000000000000000 defines a normalized REAL*4 quantity."
100	Change Exercise 4.10.11 to read "Find the bit pattern that represents 5.5 as a normalized IEEE REAL*4 number."
103	In Exercise 4.10.30 the recursion should read $$\bar{x} \leftarrow \bar{x} + (x - \bar{x})/i$$
145	Change "If any of the listed functions" to "If any of the floating-point functions" in line 4 below the table.
156	In the first line change "then" to "than".
156	In Exercise 6.8.36, write a program to compute gamma(erf(ln(x))) and use it to verify that gamma(erf(ln(pi))) = 1.0730819520232482
165	In the middle of the page, the length of each array element is 4 because L was explicitly declared INTEGER*4.
190	In S2 of Exercise 8.8.7, remove the C (the lower-case text is supposed to represent a segment of code).
213	Near the bottom of the page change "attaches plotfile to unit 7" to "attaches plotfile to unit 9".

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214	The example showing redirection of both standard out and standard error to the same file should read unix[17] a.out < input > output 2>&1 &
214	In the last paragraph, replace "on the next page" by "below".
258	Change "What happens of" to "What happens if" in line 2 up from the bottom of the page.
264	In Exercise 10.9.40, replace "on the next page" by "below", replace the floor symbols by ceiling symbols, and replace the natural log by the log base 2. For n=20 Sturges' rule calls for 6 cells, not 4 as shown in the example.
279	Change Y(2) to Y(3) in these two places: "Y(3) will be the sum of three terms" "by hand if we were finding Y(3) and skipped"

282	The last 9 lines of the ADDNOD subroutine should read
	`      1 NEXT=LIST(I,2)`
	`        IF(NEXT.EQ.0) GO TO 2`
	`        IF(VALUE.LE.LIST(NEXT,1)) GO TO 2`
	`        I=NEXT`
	`        GO TO 1`
	`      2 LIST(I,2)=N`
	`        LIST(N,2)=NEXT`
	`        RETURN`
	`        END`

418	Exercise 13.13.1 should refer to 47, not 50, nonblank characters identified in Chapter 1 as legal in Classical Fortran source code (outside of character strings).
419	In Exercise 13.13.8 the file stuff.f should declare `        REAL*8 Y,T` and the INCLUDE statements should put the file names in single forward quotes as 'stuff.f' and 'body.f'.
422	In Exercise 13.13.21, add below the DIMENSION statement `        DATA Y/10*0.0/`
423	In Exercise 13.13.24, replace STOP by PRINT *,I,J,K and replace END by : to denote additional code, and change "program" to "code segment".
466	The FORMAT statement is missing a comma; F17.16' + ' should be F17.16,' + '

483	In Exercise 14.8.12, make the code read like this.
	`        EX=0.`
	`        CALL SUBX(EX)`
	`        STOP`
	`        END`
	`        SUBROUTINE SUBX(EX)`
	`        CALL EX`
	`        RETURN`
	`        END`

586	In the last line on the page change "56" to "64".
587	In the first line on the page change "44" to "52".

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       | In the table replace entries as follows:
       | "EXPONENT(R)  |  p+1 for real R"
       | "FRACTION(R)  |  (1+f)/2 for real R"
-------+-------------------------------------------------------------
588    | Replace the second paragraph with this one:
       | "In terms of the IEEE floating-point representation of
       | an argument value, EXPONENT and FRACTION return p+1 and
       | (1+f)/2.  In our example, 37.5 is positive so the sign
       | bit s is zero, p+1 = 6, and (1+f)/2 = 0.5859375,
       | representing 2^p x (1+f) = 2^(p+1) x (1+f)/2
       | = 2^6 x 0.5859375 or 37.5 ."
-------+-------------------------------------------------------------
598    | In the last paragraph, the sentence beginning "In our"
       | should read "Using DISTRIBUTE C(*,BLOCK) above we send
       | both rows of A and 2 columns of B to each processor, 24
       | elements altogether, but using DISTRIBUTE C(BLOCK,*)
       | we send one row of A and all 4 columns of B to each
       | processor, 30 elements."
-------+-------------------------------------------------------------
605    | The second set of FORALL statements should specify
       | index limits of 1:N not 1,N.
-------+-------------------------------------------------------------
606    | In the second paragraph, the index pairs are on and
       | above the diagonal not on and below.
-------+-------------------------------------------------------------
610    | The loops should say I=1,3 and J=1,5
-------+-------------------------------------------------------------
612    | The last paragraph should say that result elements are
       | distributed with columns of S.
-------+-------------------------------------------------------------
617    | Delete 7 lines starting with CALL REPORT, and Observation
       | number 6.  VAL is dynamically allocated and DISTRIBUTEd,
       | so it cannot be adjustably dimensioned in a subprogram.
-------+-------------------------------------------------------------
621    | In Exercise 17.4.3, change PRMPT(12) to PRMPT(9), change
       | 12A1 to 9A1, and replace the PRINT statement by
       |     1 WRITE(6,902) TOTAL
       |   902 FORMAT(' '/' total=',F5.0)
-------+-------------------------------------------------------------
623    | In Exercise 17.4.11, delete (b).
-------+-------------------------------------------------------------
625    | In Exercise 17.4.23, change the code to read like this.
       |       WRITE(6,901) 37.5000000000000030D0
       |   901 FORMAT(F19.16)
       |       STOP
       |       END
-------+-------------------------------------------------------------
625    | In Exercise 17.4.27, make the first line of code
       |       X=(-B+DSQRT(B**2-4.D0*A*C)) ! this is the numerator
-------+-------------------------------------------------------------
627    | In Exercise 17.4.38, the DISTRIBUTE directives should
       | say ONTO instead of ON.  In the second program add
       |       ALIGN(A*,J+1) WITH B(*,J)
       | under the ALIGN that is already present.
-------+-------------------------------------------------------------
628    | In Exercise 17.4.40, make the first line of code
       |       INTEGER*4 K(1000)/1000*0/
-------+-------------------------------------------------------------
628    | In Exercise 17.4.41, make the third line of code
       |       IF(DEXP(X(I)).LT.0.D0) X(I+1)=0.D0
-------+-------------------------------------------------------------
628    | In Exercise 17.4.42, change (c) to read "Can you add
       | directives to translate your Classical Fortran program to
       | HPF?  If possible run it on the same test cases...
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628	In Exercise 17.4.43, change the wording to "If so, is synchronization required between the processors?"
629	In Exercise 17.4.47, change the wording as follows. "If K is initially a vector of zeros, the effect of the loop is to assign K(L)=L for all elements after the first if and only if the value read for K(1) is positive. (a) Write HPF code to show how this process can be parallelized after all, using (a) an INDEPENDENT DO loop or (b) a FORALL statement.
671	The changeall shell script as given can fail or yield wrong results if either frompattern or topattern contains certain characters that are neither letters nor digits. Please instead use the version of changeall in the archive pgm.tar.tz, which can be downloaded from https://www.ashermath.com.
673	In Exercise 18.8.6, the CALL SHIFTL is on line 59 of subroutine STRINS (the final stanza is lines 56-62).
694	In Reference [166] the wizard's name should be spelled Gandalf.