At execution of $A[f]:=r$; on line prior to that labeled schell, $f$ has not necessarily been assigned a value. $f$ has a value if, and only if, the Boolean expression $B[k]>0 \wedge B[k]<B[m]$ is true for at least one of the relevant values of $k$. In particular when matrix $A$ is set up by $A[i]:=i$; for each $i$ the Boolean expression above is false on the first call.

ALGORITHM 202 is the best and fastest algorithm of the exicographic set so far published.

A collected comparison of these algorithms is given in Table I. $t_{n}$ is the time for complete generation of $n$ ! permutations. Times are scaled relative to $t_{8}$ for Algorithm 202, which is set at 100. Tests were made on an ICT 1905 computer. The actual time $t_{8}$ for Algorithm 202 on this machine was 100 seconds. $r_{n}$ has the usual definition $r_{n}=t_{n} /\left(n \cdot t_{n-1}\right)$.

TABLE I

| Algorilhm | $t_{6}$ | $t_{7}$ | $t_{8}$ | $r_{6}$ | $r_{7}$ | $r_{8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87 | 118 | - | - | - | - | - |
| 102 | 2.1 | 15.5 | 135 | 1.03 | 1.08 | 1.1 |
| 130 | - | - | - | - | - | - |
| 202 | 1.7 | 12.4 | 100 | 1.00 | 1.00 | 1.00 |

## CERTIFICATION OF:

ALGORITHM 258 [H]
TRANSPORT
[G. Bayer, Comm. ACM 8 (June 1965), 381]
ALGORITHM 293 [H]

## TRANSPORTATION PROBLEM

[G. Bayer, Comm. ACM 9 (Dec. 1966), 869]
Lee S. Sims (Recd. 21 Feb. 1967 and 17 Mar. 1967)
Kates, Peat, Marwick \& Co., Toronto, Ont., Canada
Both of these algorithms were coded in Extended Algol 60 and tested on a Burroughs B5500. Three problems were solved correctly, one of them being of medium size ( $55 \times 167$ ). On this larger problem transp 1 was found to be about twice as fast as transport.

In coding and debugging transp1 three apparent errors were found. In the right-hand column on page 870 , after line 27 which is $i:=l i s t u[u] ; n l v i:=n l v[i] ;$
a line is missing. This line should read
for $s:=(i-1) \times n+1$ step 1 until nlvi do
Also in the right-hand column, the line s4: ;
should be inserted ahead of line -12 , which begins
comment Step 4. A column $j$ with $b[j]$ has been labeled, $b[j]$
On page 871 , in the left-hand column, line -22 which reads
for $s:=1$ step 1 until $n$ do
should read
for $s:=l$ step 1 until $n$ do

CERTIFICATION OF ALGORITHM 285 [H]
THE MUTUAL PRIMAL-DUAL METHOD
[Thomas J. Aird, Comm. ACM 9 (May 1966), 326]
H. Späth (Recd. 13 Feb. 1967)

Institut für Neutronenphysik und Reaktortechnik, Kernforschungszentrum, Karlsruhe, Germany

The procedure Linearprogram has been translated into Fortran II and successfully run on the IBM 7074 Computer. The following corrections had been made (the first two are merely typographical errors).

1. P. 328, left column, 1 line after label $B 3$ : reads:
if $A[r o w[k-1, i], \operatorname{col}[k, 0]]>$ then
should read:
if $A[r o w[k-1, i], \operatorname{col}[k, 0]]>0$ then
2. P. 328 , left column, 1 line after label $B 4$ :
reads:
if $A[r o w[k-1, i], \operatorname{col}[k, 0]]>$ then
should read:
if $A[\operatorname{row}[k-1, i], \operatorname{col}[k, 0]]>0$ then
3. P. 328, right column, after the end of the procedure pickapivot and before the label NEXTPIVOT there must be inserted the statement
$\operatorname{col}[0,0]:=0 ;$
Otherwise col $[0,0]$ has no assigned value when the procedure subschema is entered for the first time.

## REMARK ON ALGORITHM 301 [S20]

AIRY FUNCTION [Gillian Bond and M.L.V. Pitteway, Comm. ACM 10 (May 1967), 291]
M.L.V. Pitteway (Recd. 19 May 1967)

Brunel University, ACTON, W.3., England
The initial minus sign has been omitted from the line immedi ately following the line
end calculation of derivatives;
The statement should read
$p:=-(r t m d x / x i) \times(2 \times A[2]+4 \times A[4]+6 \times A[6]$
$+8 \times A[8]+10 \times A[10]) ;$

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