

September 8, 1961

ILLIAC AUXILIARY PROGRAM LIBRARY INDEX

<u>LABEL</u>	<u>SERIAL</u>	
B2	50	Complex Number Operations (54) (DOI or SADOI)
C01	110	Post Mortem for Fractions and their Locations (63) (Bootstrap)
D3	35	Sequence Checking Routine (30) (SADOI Only)
E1	40	Integration for $f(x)$ Given at Equal Increments of x (45) (SADOI or DOI)
E6	221	Integration over a Single Interval (Tabulated Values) (32) (SADOI or DOI)
E7	253	Simultaneous Integration by Simpson's Rule (49) (DOI or SADOI)
E8	307	Integration by Weddle's Rule (30)
E9	308	Closed (Newton-clodes) and open (Steffensen) Quadrature (Numerical Integration for tabulated function values) $15+N$ (Closed Quadrature) $13+N$ (Open Quadrature)
E10	310	Evaluation of Exponentially Weighted Semi-Infinite Integrals by Quadrature (Laguerre Quadrature) $(12+2N)$
E11	311	Evaluation of Exponentially Weighted Infinite Integrals by Quadrature (Hermite Quadrature) $(18+2N)$
EA1	257	Floating Point Simpson's Rule Integration (41) (SADOI Only)
HF1	111	Zero of a Solution of a Differential Equation (16) (SADOI or DOI)
K4	171	Analysis and Intercorrelation of Scores Based on Paired Comparisons (Entire Program) (DOI Only)
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KL1	192	Quartimax Orthogonal Rotation of Factors (Complete Program) (DOI Only)
KA1	123	Polynomial Approximation (60)
M2	118	Automatic Inversion of a Symmetric Matrix (Entire Program)
M3	117	Automatic Eigenvalue-Eigenvector Program (Entire Program) (DOI Only)
M7	150	Principal Axes Factor Analysis (Entire Program) (DOI Only)
M8	151	Sums of Squares of Rows and Columns (Entire Program) (DOI Only)
M9	152	Square Root Factorization (See Description)
M10	153	Estimation of Communalities by the Method of Maximum Likelihood (Entire Program)
M16	187	Matrix Multiplication when the Common Dimension is Large (Complete Program)
M29	295	Drum Routine for Linear Programming by the Simplex Method (Complete Floating Point Program) (DOI or SADOI)
M30	296	William's Memory Routine for Linear Programming by the Simplex Method-Modified for a Variable Resource b_i (Complete Floating Point Program) (SADOI or DOI)
M31	297	Drum Routine for Linear Programming by the Simplex Method-Modified for Variable Resource b_i (Complete Floating Point Program) (SADOI or DOI)
M32	298	William's Memory Routine for Linear Programming by the Simplex Method-Modified for Variable C_j (Complete Floating Point Program)
M33	299	Drum Routine for Linear Programming by the Simplex Method-Modified for Variable C_j (Complete Floating Program)

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<u>LABEL</u>	<u>SERIAL</u>	
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N10	205	Input a Sequence of Integers with Sum Check (26) (SADOI or DOI)
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