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The Original Inventory Array:

Inventory Number	Item Description	Quantity on hand	Reorder Number	Cost of Item	Selling Price
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1001	Data Structures in C	15	25	10.52	38.75
4202	Operating Systems	2	25	17.75	41.35
9903	Using QBasic	28	100	8.25	27.69
2204	Management Science	17	40	21.6	52.75
1905	C++ Program Design	1	50	19.99	39.99
1906	Oh! Pascal	0	20	16.65	32.32
1807	Using E-Mail	19	35	9.95	21.75
5708	Introduction to HTML	201	50	13.35	28.89
4409	Computer Hardware	15	25	37.85	62.98
1910	Computing Essentials	33	150	15.55	33.72
3311	Analytic Geometry	2	15	21.72	34.45
1912	Networks in Action	12	30	37.65	68.88
3913	Assembly Lang Prog	21	25	3.35	9.99
5014	FORTRAN 77	16	20	20.95	31.95
4015	Basic Algebra	122	600	17.75	30.25
3316	Using Netscape	74	50	6.65	19.95
2217	C How to Program	33	75	18.85	35.55
3018	COBOL Programming	52	40	21.25	43.75
1119	The Joy of C	13	39	10.33	22.55
5520	The Joy of C++	24	48	21.24	52.34
5421	Computer Literacy	25	50	16.67	33.78
1322	C for Dummies	13	25	2.33	42.33
3323	Modern Algebra	25	125	12.25	34.75
7624	Network Security	1	15	37.89	57.99
1225	Zoology Made Easy	9	20	28.88	65.65
2026	Learning C++	17	50	19.98	37.78

The Inventory Array sorted in descending order  
according to the quantity on hand using the Exchange Sort:

Inventory Number	Item Description	Quantity on hand	Reorder Number	Cost of Item	Selling Price
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5708	Introduction to HTML	201	50	13.35	28.89
4015	Basic Algebra	122	600	17.75	30.25
3316	Using Netscape	74	50	6.65	19.95
3018	COBOL Programming	52	40	21.25	43.75
2217	C How to Program	33	75	18.85	35.55
1910	Computing Essentials	33	150	15.55	33.72
9903	Using QBasic	28	100	8.25	27.69
3323	Modern Algebra	25	125	12.25	34.75
5421	Computer Literacy	25	50	16.67	33.78
5520	The Joy of C++	24	48	21.24	52.34
3913	Assembly Lang Prog	21	25	3.35	9.99
1807	Using E-Mail	19	35	9.95	21.75
2026	Learning C++	17	50	19.98	37.78
2204	Management Science	17	40	21.6	52.75
5014	FORTRAN 77	16	20	20.95	31.95
1001	Data Structures in C	15	25	10.52	38.75
4409	Computer Hardware	15	25	37.85	62.98
1322	C for Dummies	13	25	2.33	42.33
1119	The Joy of C	13	39	10.33	22.55
1912	Networks in Action	12	30	37.65	68.88
1225	Zoology Made Easy	9	20	28.88	65.65
4202	Operating Systems	2	25	17.75	41.35
3311	Analytic Geometry	2	15	21.72	34.45
7624	Network Security	1	15	37.89	57.99
1905	C++ Program Design	1	50	19.99	39.99
1906	Oh! Pascal	0	20	16.65	32.32

The Inventory Array sorted in descending order  
according to the selling price using the Shell Sort:

Inventory Number	Item Description	Quantity on hand	Reorder Number	Cost of Item	Selling Price
-----	-----	-----	-----	-----	-----
1912	Networks in Action	12	30	37.65	68.88
1225	Zoology Made Easy	9	20	28.88	65.65
4409	Computer Hardware	15	25	37.85	62.98
7624	Network Security	1	15	37.89	57.99
2204	Management Science	17	40	21.6	52.75
5520	The Joy of C++	24	48	21.24	52.34
3018	COBOL Programming	52	40	21.25	43.75
1322	C for Dummies	13	25	2.33	42.33
4202	Operating Systems	2	25	17.75	41.35
1905	C++ Program Design	1	50	19.99	39.99
1001	Data Structures in C	15	25	10.52	38.75
2026	Learning C++	17	50	19.98	37.78
2217	C How to Program	33	75	18.85	35.55
3323	Modern Algebra	25	125	12.25	34.75
3311	Analytic Geometry	2	15	21.72	34.45
5421	Computer Literacy	25	50	16.67	33.78
1910	Computing Essentials	33	150	15.55	33.72
1906	Oh! Pascal	0	20	16.65	32.32
5014	FORTRAN 77	16	20	20.95	31.95
4015	Basic Algebra	122	600	17.75	30.25
5708	Introduction to HTML	201	50	13.35	28.89
9903	Using QBasic	28	100	8.25	27.69
1119	The Joy of C	13	39	10.33	22.55
1807	Using E-Mail	19	35	9.95	21.75
3316	Using Netscape	74	50	6.65	19.95
3913	Assembly Lang Prog	21	25	3.35	9.99

The Inventory Array sorted in ascending order  
according to the inventory number using the Quick Sort:

Inventory Number	Item Description	Quantity on hand	Reorder Number	Cost of Item	Selling Price
-----	-----	-----	-----	-----	-----
1001	Data Structures in C	15	25	10.52	38.75
1119	The Joy of C	13	39	10.33	22.55
1225	Zoology Made Easy	9	20	28.88	65.65
1322	C for Dummies	13	25	2.33	42.33
1807	Using E-Mail	19	35	9.95	21.75
1905	C++ Program Design	1	50	19.99	39.99
1906	Oh! Pascal	0	20	16.65	32.32
1910	Computing Essentials	33	150	15.55	33.72
1912	Networks in Action	12	30	37.65	68.88
2026	Learning C++	17	50	19.98	37.78
2204	Management Science	17	40	21.6	52.75
2217	C How to Program	33	75	18.85	35.55
3018	COBOL Programming	52	40	21.25	43.75
3311	Analytic Geometry	2	15	21.72	34.45
3316	Using Netscape	74	50	6.65	19.95
3323	Modern Algebra	25	125	12.25	34.75
3913	Assembly Lang Prog	21	25	3.35	9.99
4015	Basic Algebra	122	600	17.75	30.25
4202	Operating Systems	2	25	17.75	41.35
4409	Computer Hardware	15	25	37.85	62.98
5014	FORTRAN 77	16	20	20.95	31.95
5421	Computer Literacy	25	50	16.67	33.78
5520	The Joy of C++	24	48	21.24	52.34
5708	Introduction to HTML	201	50	13.35	28.89
7624	Network Security	1	15	37.89	57.99
9903	Using QBasic	28	100	8.25	27.69

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END OF PROGRAM OUTPUT