

Source matrix initialized to value of row for each column										
A	0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	1	2	3	4	5	6	7	8	9	10
3	1	2	3	4	5	6	7	8	9	10
4	1	2	3	4	5	6	7	8	9	10
5	1	2	3	4	5	6	7	8	9	10
6	1	2	3	4	5	6	7	8	9	10
7	1	2	3	4	5	6	7	8	9	10
8	1	2	3	4	5	6	7	8	9	10
9	1	2	3	4	5	6	7	8	9	10

Program – calculate results using dot product										
C <sub>ijk</sub>	0	1	2	3	4	5	6	7	8	9
0	55	110	165	220	275	330	385	440	495	550
1	55	110	165	220	275	330	385	440	495	550
2	55	110	165	220	275	330	385	440	495	550
3	55	110	165	220	275	330	385	440	495	550
4	55	110	165	220	275	330	385	440	495	550
5	55	110	165	220	275	330	385	440	495	550
6	55	110	165	220	275	330	385	440	495	550
7	55	110	165	220	275	330	385	440	495	550
8	55	110	165	220	275	330	385	440	495	550
9	55	110	165	220	275	330	385	440	495	550

MANUAL Program – calculate results using for loops										
C <sub>ijk</sub>	0	1	2	3	4	5	6	7	8	9
0	55	110	165	220	275	330	385	440	495	550
1	55	110	165	220	275	330	385	440	495	550
2	55	110	165	220	275	330	385	440	495	550
3	55	110	165	220	275	330	385	440	495	550
4	55	110	165	220	275	330	385	440	495	550
5	55	110	165	220	275	330	385	440	495	550
6	55	110	165	220	275	330	385	440	495	550
7	55	110	165	220	275	330	385	440	495	550
8	55	110	165	220	275	330	385	440	495	550
9	55	110	165	220	275	330	385	440	495	550

CBLAS Program – calculate results using clas										
C <sub>ijk</sub>	0	1	2	3	4	5	6	7	8	9
0	55	110	165	220	275	330	385	440	495	550
1	55	110	165	220	275	330	385	440	495	550
2	55	110	165	220	275	330	385	440	495	550
3	55	110	165	220	275	330	385	440	495	550
4	55	110	165	220	275	330	385	440	495	550
5	55	110	165	220	275	330	385	440	495	550
6	55	110	165	220	275	330	385	440	495	550
7	55	110	165	220	275	330	385	440	495	550
8	55	110	165	220	275	330	385	440	495	550
9	55	110	165	220	275	330	385	440	495	550

Source matrix initialized to value of row for each column										
B	0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	1	2	3	4	5	6	7	8	9	10
3	1	2	3	4	5	6	7	8	9	10
4	1	2	3	4	5	6	7	8	9	10
5	1	2	3	4	5	6	7	8	9	10
6	1	2	3	4	5	6	7	8	9	10
7	1	2	3	4	5	6	7	8	9	10
8	1	2	3	4	5	6	7	8	9	10
9	1	2	3	4	5	6	7	8	9	10

Infinity Norm : max of |total of each row|

MANUAL	CBLAS
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025
3,025	3,025

Program – difference from dot.product										
C <sub>ijk</sub>	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0

Program – difference from dot-product										
C <sub>ijk</sub>	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0