

The purpose of this exercise is to add two vectors and then multiply two matrices. instead of creating a large vector, we used interrupts in the addition function to manage the computation more efficiently. The program is designed in such a way that it performs parallel processing on the number of cpu processors, and the high numbers obtained were tested on the core 2 dou 2800Gh processor, but the same program obtained almost 2 times less numbers on the 4-core amd processor.

### Adding vectors

speedup	ave	Test3	Test2	Test1	Amount of vectors	Number of processors	Serial execution time
-	17.582	17.600	17.570	17.578	1000	1	~ <b>=17.5</b>
x 1.77	9.896	9.766	9.781	10.141	1000	2	~ <b>=9.7</b>

### Matrix multiplication

speedup	ave	Test3	Test2	Test1	Amount of vectors	Number of processors	Serial execution time
-	15.690	15.680	15.688	15.703	100	1	~ <b>=17.6</b>
x 9.655	1.625	1.609	1.625	1.641	100	10	~ <b>=1.6</b>