Labo 3 : Conclusion

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1 Summary

We have now three way of doing a multiplication :

- Using the original instruction set,
- Using the special instruction set,
- Using the MUL instruction.

2 Performance

Let's take a complicate multiplication 41056*35036 to measure performance and be able to conclude from those data:

	Instructions	CPI
Original	2683	1.38
Special	341	1.32
MUL	7	1.57

3 Conclusion

Data shown above speak for themselves. The efficency of the multiplication operation is significantly better when the instruction set is extended even if the complexity of multiplication is linear in every case.

That is a really interesting because it tends to show us that both a considerable instruction set and software that use all its potential will make programs execute faster.