Using Assembly Language in Linux.

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Note: there is a turkish translation of this article.

Contents:

Introduction.

This article will describe assembly language programming under Linux. Contained within the bounds of the article is a comparison between Intel and AT&T syntax asm, a guide to using syscalls and a introductory guide to using inline asm in gcc.

This article was written due to the lack of (good) info on this field of programming (inline asm section in particular), in which case i should remind thee that this is not a shellcode writing tutorial because there is no lack of info in this field.

Various parts of this text I have learnt about through experimentation and hence may be prone to error. Should you find any of these errors on my part, do not hesitate to notify me via email and enlighten me on the given issue.

There is only one prerequisite for reading this article, and thats obviously a basic knowledge of x86 assembly language and C.

Intel and AT&T Syntax.

Intel and AT&T syntax Assembly language are very different from each other in appearance, and this will lead to confusion when one first comes across AT&T syntax after having learnt Intel syntax first, or vice versa. So lets start with the basics.

Prefixes.