

An Introduction to Reverse Engineering

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What is Software Reverse Engineering?

- ▶ IEEE Defines it as “the process of analyzing a subject system to identify the system’s components and their interrelationships and to create representations of the system in another form or at a higher level of abstraction”
- ▶ Generally is taking a piece of compiled software and analyzing it, revealing information about the source code
- ▶ Often used in security research, but also have implication in game emulation and other areas of proprietary software.

Examples

Some examples of commonly used commands and features are included, to help you get started.

Tables and Figures

- ▶ Use `tabular` for basic tables — see Table 1, for example.
- ▶ You can upload a figure (JPEG, PNG or PDF) using the files menu.
- ▶ To include it in your document, use the `includegraphics` command (see the comment below in the source code).

Item	Quantity
Widgets	42
Gadgets	13

Table 1: An example table.

Readable Mathematics

Let X_1, X_2, \dots, X_n be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $\text{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_i^n X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.