

LaTeX Training **Symbols**

These are the standard keyboard characters. In LaTeX, most can just be typed. Some must be escaped with the backslash (`\`). Others require special commands. In text mode, the characters “>”, “<”, and “|” produce “>”, “<”, and “|” respectively.

| Name | Symbol | Special Command |
|-------------------|--------|--------------------------|
| Period | . | |
| Colon | : | |
| Semicolon | ; | |
| Comma | , | |
| Exclamation | ! | |
| Left Apostrophe | ‘ | |
| Right Apostrophe | ’ | |
| Left Parenthesis | (| |
| Right Parenthesis |) | |
| Left Bracket | [| |
| Right Bracket |] | |
| Hyphen | - | |
| En-Dash | — | -- |
| Em-Dash | — | --- |
| Slash | / | |
| Asterisk | * | |
| At | @ | |
| Plus | + | |
| Equal | = | |
| Hash | # | \# |
| Dollar Sign | \$ | \\$ |
| Percent | % | \% |
| Ampersand | & | \& |
| Underscore | _ | _ |
| Left Brace | { | \{ |
| Right Brace | } | \} |
| Vertical Bar | | \$ or \textbar |
| Less than | < | \$< or \textless |
| Greater than | > | \$> or \textgreater |
| Tilde | ~ | \~{} or \textasciitilde |
| Tilde | ~ | \sim |
| Circumflex | ^ | \^{} or \textasciicircum |
| Backslash | \ | \textbackslash |

The basic LaTeX document.

```
\documentclass[options]{\classname}

% Comments start with a percent sign (%) and run to the end of the line.

% This is a comment. It is in the ‘preamble’, the part of the document
% that comes between the \documentclass{} specification and the
% \begin{document}. There are many things that can be placed here to af-
% fect the entire document.

% \usepackage[package_options]{package_list} is one of the most common.

% Another common one is a \setlength{}{} command.

\begin{document}

% The body of the document goes here. All commands not in the preamble
% and all of the text you want typeset must occur here. Paragraphs are
% indicated by a blank line in the input. This line must have nothing on
% it, not even a comment. But 10 blanks is the same as 1 blank line. In
% the article class, the first line of paragraphs is indented and there
% is no extra space between them.

% You can use a different class or use some \setlength{}{} commands to
% change how the paragraphs are displayed.

\end{document}
```

Text Attributes

Plain text does not always give us what we need. Applying attributes to text can help us create a better document. You must realize that overuse of text attributes is annoying to the reader and detracts significantly from the emphasis it might otherwise provide. There are three (3) basic text attributes that are commonly used: bold, italic, and teletype.

Bold is what you expect except that to make a word bold you use the `\textbf{}` command and get **bold**. Here, the text to be made bold is enclosed in the braces. Italics are done the same way using `\textit{}`, like *this*. Teletype, `\texttt{}`, is slightly different. For the first two we took the basic font type of the document (the default is proportionally spaced Computer Modern) and just selected the bold or italic font style. For teletype, a fixed spaced font similar to that used by old-style teletypes and typewriters, is selected. That means that it makes things stand out in a more subtle way than the other two. This is the font family that is usually used for displaying program code in a document. And teletype font looks like `this`

Another attribute you can apply is underlining but you should be very careful about this. The command is `\underline` and we get this.

There are times when text should be centered on the page. For this we create a new *environment*.

We use `\begin{center} ... \end{center}` to delimit text that we want centered.

The last thing we will discuss is text size. There are, in general, 10 sizes. We place one of the size commands in the document and the text remains that size until we place a `\normalize` command in the text or the enclosing environment changes.

| | | | | | |
|-----|----------------------------|-----|--------------------------|-----|---------------------|
| Tex | <code>\tiny</code> | Tex | <code>\normalsize</code> | Tex | <code>\LARGE</code> |
| Tex | <code>\scriptsize</code> | Tex | <code>\large</code> | Tex | <code>\huge</code> |
| Tex | <code>\footnotesize</code> | Tex | <code>\Large</code> | Tex | <code>\HUGE</code> |
| Tex | <code>\small</code> | | | | |

One thing you must understand, if the size is not available in the current font family, there will be a substitution for the next closest thing.

On the last page is the text you are to place in your homework assignment. The instructions are at the bottom of the page.

PREFACE

By enrolling in this self-study course, you have demonstrated a desire to improve yourself and the Navy. Remember, however, this self-study course is only one part of the total Navy training program. Practical experience, schools, selected reading, and your desire to succeed are also necessary to successfully round out a fully meaningful training program.

COURSE OVERVIEW: To introduce the student to the subject of Matter, Energy, and Direct Current who needs such a background in accomplishing daily work and/or in preparing for further study.

THE COURSE: This self-study course is organized into subject matter areas, each containing learning objectives to help you determine what you should learn along with text and illustrations to help you understand the information. The subject matter reflects day-to-day requirements and experiences of personnel in the rating or skill area. It also reflects guidance provided by Enlisted Community Managers (ECMs) and other senior personnel, technical references, instructions, etc., and either the occupational or naval standards, which are listed in the Manual of Navy Enlisted Manpower Personnel Classifications and Occupational Standards, NAVPERS 18068.

THE QUESTIONS: The questions that appear in this course are designed to help you understand the material in the text.

VALUE: In completing this course, you will improve your military and professional knowledge. Importantly, it can also help you study for the Navy-wide advancement in rate examination. If you are studying and discover a reference in the text to another publication for further information, look it up.

Use only the text above the line of asterisks!

1. You may only use commands discussed in this document!!!! You may NOT use any other commands or packages (except for items 7 and 8).
2. The documentclass will be **article**.
3. Use **12pt** font size.
4. Center the word "PREFACE" and make it bold and \Large.
5. Each set of words that are all capitalized (like COURSE OVERVIEW:) are to be bold, and include the colon in that.
6. The words in the third paragraph starting with **Manual** and ending with **Standards** are to be italicized.
7. There should be NO indentation for the first line of the paragraphs.
8. There should be a 1em space between the paragraphs.