

Verbatim environments

JCF

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If you want to avoid any interpretation of symbols or commands, use the environment `verbatim`.

Example:

```
\begin{verbatim}
  This is
  a \textit{just} $ ! -- whatever
\end{verbatim}
```

```
  This is
  a \textit{just} $ ! -- whatever
```

For small amounts of text use:

```
normal text \verb|text $$$# }| normal text
```

```
normal text text $$$# } normal text
```

The character after `\verb` (the delimiter) can be any character:

```
Normal text \verb/...|...|.../ again $ \pi^2$
```

```
Normal text ..|...|... again  $\pi^2$ 
```

The package `fancyvrb` (available at <https://www.ctan.org/pkg/fancyvrb>) allows you to make fancy stuff with an extended version of the environment:

`Verbatim`

```
\begin{Verbatim}[frame=lines,framerule=1mm,numbers=left]
  First verbatim line.
  Second verbatim line.
  Third verbatim line.
\end{Verbatim}
```

```
1 First verbatim line.
2 Second verbatim line.
3 Third verbatim line.
```

There are lots of other possibilities!

If you want to execute commands inside verbatim text, use the package `alltt`.

```
\begin{alltt}
This environment preserves
  the formatting   and the spacing
but \textcolor{red}{executes} commands and
  some math expressions \(\pi\approx 3.14\)
\end{alltt}
```

This environment preserves
the formatting and the spacing
but **executes** commands and
some math expressions $\pi \approx 3.14$

The package `listings` (available at <http://ctan.org/pkg/listings>) can format code for many languages.

```
\begin{lstlisting}[language=C,frame=single,
                  basicstyle=\footnotesize\ttfamily,
                  commentstyle=\itshape\color{purple!40!black},
                  numbers=left]
#include <stdio.h>
int main (void) {
    printf("Hello World!\n"); /*comment */
    return 0;
}
\end{lstlisting}
```

```
1   #include <stdio.h>
2   int main (void) {
3       printf("Hello World!\n"); /*comment */
4       return 0;
5   }
```

You can also include (part of) a file:

```
\lstinputlisting[language=C++,tabsize=2,frame=L]{file.cpp}
```

```
|| #include <iostream>
||
|| int main(void)
|| {
||     std::cout << "Hello world!" << std::endl;
||     return 0;
|| }
```