Applied Numerical Computing for Scientists and Engineers

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In-Class Problem: LaTeX Basics

Use the built-in article class in LaTeX and the use the booktabs package as in the tutorial with Overleaf as the editor to create a document that has a table and a cross-reference to a table.

1. Part 1

1. Write the LaTeX code to reproduce Table 1. Note that the parameters use the inline math notation surrounded by pairs of $'s and that superscripts or subscripts require inline math notation.

2. Write the LaTeX code to cross reference Table 1.

Table 1: Parameter values for two cases

Parameter	Units	Case 1	Case 2
a	h	1.0	1.0
b_1	h	1.0	1.0
b_2	ng h ml^{-1}	1.0	1.0

2. Part 2

1. Write the LaTeX code to reproduce Table 2. You are welcome to search the internet for ideas, packages, or code snippets for formatting multi-column tables.

2. Write the LaTeX code to cross reference Table 2.

Table 2: Parameter values for two cases with some values reported and others calculated

Parameter	Units	Case 1	Case 2
Reported in the literature			
a	h	1.0	1.0
b_1	h	1.0	1.0
b_2	ng h ml^{-1}	1.0	1.0
Calculated from literature values			
c	h^{-1}	2.0	2.0
d	h^{-1}	2.0	2.0