Using This Book

When we first worked on Logo, we thought a lot about the turtle and the rabbit. The turtle is a bit slow. But remember, her distant relative *did* win the race.

Are you new to Logo?

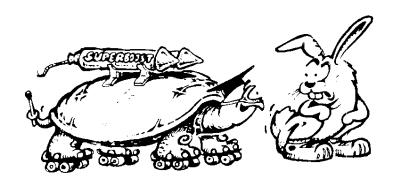
This book is written for you. It's for new turtles to explore, regardless of your age. Take your time. Explore these pages and discover Logo, one step at a time. Older, more experienced turtles may want to skip through the early chapters quickly.

Start with what you know. Add bits and pieces together until you can do whatever you want to do. If that sounds like a lot, don't worry. You can do it. Take all the time you need. Our friends will help you.

If you want to be like the rabbit sometimes, that's OK, too. After all, he did win the race. If you want to skip some parts of the book, that's just fine. You can always come back to them later. That's up to you.

The turtle and the rabbit each took their own path to discover Logo. But they didn't stop with the things in the book. Along the way, they made up there own pictures, puzzles, games, and music. And when they finally got to the end, you should see what they could do.

In fact, they're going to write the next book. Wait and see.



"If the teacher asks you to write a story, do you copy that story from a book? Or do you use the words you learned how to spell to write a story of your very own?"

"I write my own stories, of course!" answered the rabbit.

"Well, rabbit, why should the computer and Logo be any different. Logo is the language you use, just like English. The keyboard is your pencil and the screen is your paper. Now why don't you see what you can do with them — all by yourself."

The poor rabbit was embarrassed enough for one day. He was angry, too; angry at himself for being so silly.

"Computers aren't that tough," thought the rabbit. "All I have to do is teach it what I want it to do."

So the rabbit sat down with his book again and began to read. Soon he was doing his own thing, not the things the book told him to do. Sure, he made mistakes. But he found that's

found that's where the fun begins.

When he finally got his procedures to do the fancy things he wanted them to do, he did a couple of cartwheels over to the turtle.

"Come see! Come see!" he said very excited and he ran back to his computer.

"Yes, that's the idea," said the turtle.

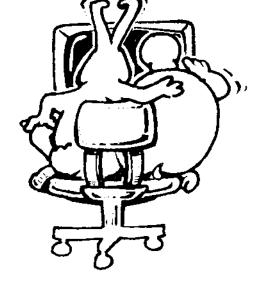
"I'm beginning to see what you mean," Morf said excitedly. "But how did you know all this so fast?"

"Rabbit," answered the turtle, "I have to be honest with you. See that small shape there in the center of the screen?"

"Sure, that's the turtle."

"Yes, and that's also my cousin, Ernestine. She's the one who makes everything happen.

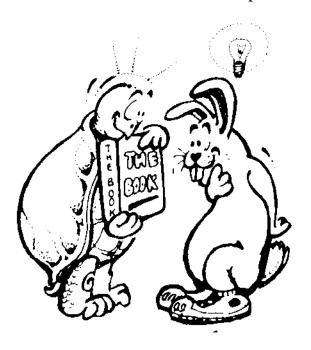
"Let's just say it runs in the family."



doing. He was just about to tease the turtle for going through the book so slowly when he stopped.

"Hey! How'd you do that? That isn't in the book," the rabbit said.

The turtle explained slowly, step by step, what she had done to make the pretty picture on the screen. But the rabbit was still puzzled.



"I know, rabbit," explained the turtle, "this isn't in the book. I made it up from what I read about in the first chapters."

"But how'd you know what to do?" asked the rabbit?"

"Gee, I thought you knew all about Logo and computers, rabbit," laughed the turtle as she turned the page.

"Logo is the most fun when you start with what you know and discover new things as you move along.

"Logo isn't just something to do at the computer. It's really about exploring new ideas -- about discovering new ways to do things."

"If I want to learn things, I'll go to school," said the rabbit. "That's what school is for!"

"The computer and Logo are for learning things, too," answered the turtle. "They're tools just like paper and pencils are tools."

"Tell me something, rabbit. When you're in school and you make a mistake on your spelling test, do you blame the spelling book? Do you blame the pencil and the paper?" asked the turtle.

"That's silly. The book doesn't take the test. And the paper and pencil can't do anything without me. If I make a mistake, that's my fault. And if I get all the words right, I'm the one who gets the Gold Star!"

I bet you think that's where the story ends. Well, not quite!

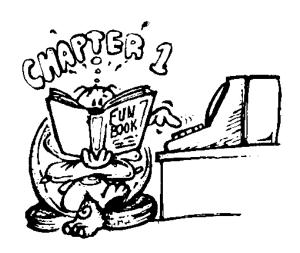
Once upon a much later time, just a few years ago in fact, there was a turtle who lived near a forest. This turtle was a distant cousin of the great-great-great grandchild of that famous tortoise. The turtle had a friend who was a rabbit, a distant cousin of the great-great-great grandchild of the not-so-famous hare.

One day, the turtle and the rabbit were each given a computer and Logo. They were both very happy and could

not wait to see what they could each do with their new presents.

The turtle opened the Logo book and began to read, one page at a time.

The rabbit opened his Logo book and just skipped over the first chapter.



It looked too easy. He wanted to find the "good stuff." He hopped and leaped all over the place. When he glanced over at the turtle, she was still reading the first chapter.

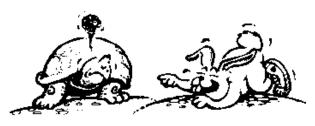
"Hey, that's the easy stuff," the rabbit said. "Look at this!"



The turtle liked what the rabbit did, but she was having lots of fun doing her own thing. She knew she'd soon be able to do the things the rabbit copied from his book.

Time passed, and the rabbit was still bouncing from one thing to another. By now, the turtle had finished Chapter 2.

More time passed. The hare took another look at what the turtle was



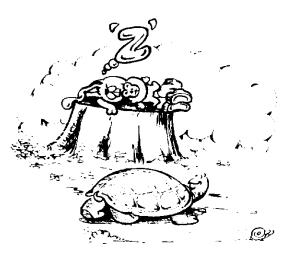
The hare laughed so hard he fell down. He held his sides as he rolled around on the ground. Of course, the hare agreed. Race day came and the big race began.

The tortoise started off at a slow, steady pace — step, step, step — never faster, never slower.

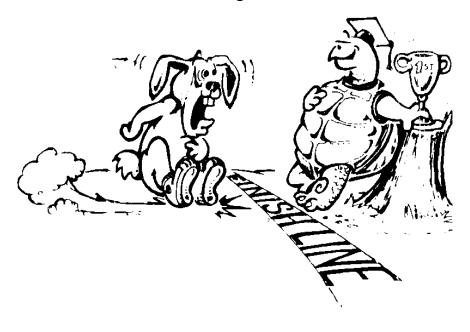
The hare leaped and hopped all over the place. He even did cartwheels around the tortoise and then sped off to have some fun before he got to the other side of the forest.

He even stopped to take a nap. He knew he had plenty of time before the tortoise would ever catch up.

I bet you know what happened.
Maybe someone read you the story about the tortoise and the hare.



The tortoise won the race and the hare felt very foolish. He never teased the hare again.



The Tortoise and the Hare...A Logo Fable



Once upon a time, there was a tortoise who moved along very slowly. The tortoise liked this slow, easy life. It was fun watching the birds, the trees, and the flowers. There was lots of time to learn from each new thing he saw as he wandered about.

Once upon that same time, there was a hare who liked to hop and leap about. Now, the hare was always teasing the tortoise about his slow, steady pace. But the tortoise never replied. He just kept minding his own business, enjoying each new sight and sound.

One day, the hare teased the tortoise one time too many.

"Hare," said the tortoise, "I challenge you to a race. Whoever can get to the other side of the forest first is the winner. And if I win, no more teasing!"