Variables are essential to expressing algorithms. They have names, they have values and those values have types. Variables have scope, too.

Thinking Of Solving A Problem

- State the task to be solved …
  “Two inputs are presented, the month and the day a person was born; the astrological sign of that date is displayed.”
- Consider how the solution could be organized
An Event Solution

- Building interactive applications favors the event approach …
  - Activating the controls causes the events
  - The event procedures (Subs) implement the processing
  - Variables are essential to passing data among events

![Diagram of controls and their labels]

Variables

- Variables name data values in the program
- Variables have a type, which is the kind of number or value that they are expected to name
  - Integer is the type for “whole numbers”, e.g. 4
  - String is the type for “letter sequences”, e.g. “four”
  - Others will be introduced when needed
- Variables are declared, which means they are listed together with their types at the start of the program or a procedure
- Variables are scoped, which means that if they are declared inside a procedure they cannot be “seen” outside the procedure
Variables ...

Declarations

The variables declared outside the procedures are global to them.

Using Variables In VB6

- One important use for variables in programming is to “capture values” from one control that will be used in another.
- For example, a radio button will be associated with specific information like the starting and ending dates of a Zodiac sign.

Used here when the OK button is clicked, but set here on radio button click.