Matlab is not strongly typed. One moment, a variable can contain a real number, the next, a string (array of characters).

C is not strongly typed. A string of characters “anything goes” can be treated as a bunch of double values or as anything else. If you know how values are stored in memory, you can do anything with them.

“whatever”

There are several definitions of strong typing. A later short essay defines the advantages and disadvantages of strong typing, as we use the term.
Strong typing requires variable declarations

Basic form:

<type>  <variable-name>

declaration variable

int x

0

x

isEven

false

1. Depending on where declaration is placed, there may be more syntax. But there is always a type and a variable name.

2. A declaration is not a statement and doesn’t get executed. It simply declares that a variable is needed and gives its type.
Variable names

Contain letters, digits, _, and $
First character cannot be a digit

Java convention for variable names:

(1) Start with a non-capital
(2) Capitalize all words except the first

apple    numberOfChildren
isEven    bankAccount

Tension:
Short names can’t give meaning of variable.
Long names produce clutter and an unwieldy looking program.

We look a this issue later.