Data Types

A Data Type refers to how the data is stored in memory and how many bytes that data needs.
The data type of a variable (or object) tells the compiler the size of the object.
You should always try and use the data type that uses the smallest number of bytes.
All variables must have an associated data type which determines what data can be stored in it.

Array	(a) array of Integer, Double, String (av) array as a single variant
Boolean (True or False / 0)	(b) zero (and default value) is False, everything else is True, use NOT to toggle 2 bytes (16 bits) Conversion - CBool
Byte (0 to 255)	(by) very small integers, use Long instead 1 byte (8 bits) Conversion - CByte
Currency (- 9.2 E+14 to + 9.2 E+14)	(c) scaled integer, use Double instead 8 bytes (64 bits) Conversion - CCur, Abbreviation Suffix - @
Date (Jan 1 100 to Dec 31 9999)	(dt) floating point numbers 8 bytes (64 bits) Conversion - CDate
Decimal* (- 7.9 E+28 to + 7.9 E+28)	(dv) Variant subtype Must be declared as a **Variant** and then converted using the CDec function 14 bytes (112 bits) Conversion - CDec
Double (- 1.8 E+308 to + 4.9 E+324)	(db) double precision floating point for decimals 8 bytes (64 bits) Conversion - CDbl, Abbreviation Suffix - #
Integer (- 32,768 to + 32,767)	(i) small integers, use Long instead 2 bytes (16 bits) Conversion - CInt, Abbreviation Suffix - %
Long (- 2.1 E+9 to + 2.1 E+9)	(l) very large integers 4 bytes (32 bits) Conversion - CLng, Abbreviation Suffix - &
LongLong	(ll) Added in Office 2010, VBA 7.0 Conversion - CLngLng, Abbreviation Suffix - ^
LongPtr	(lp) Added in Office 2010, VBA 7.0 LongLong on 64 bit, Long on 32 bit Conversion - CLngPtr
Object	(o) stored as a reference to an object, default value is Nothing 4 bytes (32 bits)
Single (- 1.3 E+38 to + 1.3 E+38)	(sg) single precision floating point for decimals, use Double instead 4 bytes (32 bits) Conversion - CSng, Abbreviation Suffix - !
String	(s) fixed and variable length, default value "" 10 bytes + length Conversion - CStr, Abbreviation Suffix - $

User Defined	(ud) for the variables (type_) for the actual user defined type
Variant	(v) any data type, often used for arrays, default value is Empty 16 - 22 bytes

Abbreviations

These are also known as Type Declaration Suffixes
It is possible declare variables by appending a special character to the end of the variable name.

```
Dim iNumber% 'integer
```

This method of declaring variables should not be used and is only available for backwards compatibility purposes.

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