

Intro to Programming

CURIE 2011

Variables

- Variables hold values
- Variables must be declared before putting values in them
- The size of the variable must be large enough to hold the value:
 - A bit-sized variable can hold a bit: 0-1
 - A byte-sized variable can hold a byte: 0-255
 - A word-sized variable can hold a word: 0-65535

Making Things Happen Over and Over...

- FOR...NEXT – certain number of times
- DO WHILE – while a certain condition is met
- DO ... UNTIL – until a certain condition is met
- DO ... LOOP – unconditionally repeat

Making Decisions

- IF ... THEN – if a certain condition is met then do something
- ELSEIF – if another condition is met
- ELSE – in all other cases
- SELECT CASE – certain situations
- Logic:
 - X > Y – greater than
 - X < Y – less than
 - X >= Y – greater than or equal to
 - X <= Y – less than or equal to
 - X <> Y – not equal to
 - X AND Y – both conditions must be met
 - X OR Y – either condition must be met

Subroutines

- Do specific things
- Must be given a label or name
- Can be “called” by main program
- Control returns to main program, line after being called
- Allows same code to be used over and over
- Makes program more compact, shorter, more logical