IBCM

“Itty Bitty Computing Machine”
Part 2

Fetch Execute Cycle

while (power is on) {
  IR := mem[PC]
  PC := PC + 1
  execute instruction in IR
}
Note: PC = program counter
      IR = instruction register

Memory

Address
00  3000
01  5000
02  6006
03  8003
04  A000
05  4000
06  F000

PC  IR
Accum

Writing IBCM Code

1. Write High Level Pseudo Code
2. Translate into IBCM Symbolic Instructions
3. Test code by hand
4. Encode into machine code
5. Load Machine code into Simulator and run.

How Would You Code This?

if B
  S1;
else
  S2;
How Would You Code This?

while(B) { S; }

IBCM Code to Sum the digits from 1 to N

Accessing Arrays in IBCM

S = S + A[i]