VirtualMachine()

+ self._memory = []
+ self._accumulator = "0000"
+ self._file = string
+self._output = string
+self._input = []

def get_memory(): returns self._memory
def get_accumulator(): returns self._accumulator
def get_output(): returns self._output
def set_inputs(): Adds inputs to self._input

def sign(): returns signed 4 bit number as string ("+0001")
def operator(self, val): returns first two digits of val
def operand(self, val): returns last two digits of val

def run(): none (Iterates through memory and performs operations)
def read(self, count, address): none
def write(self, count, address): none
def resize_memory(self): none
def load(self, i): none
def store(self, i): none
def add(self, curr): none
def subtract(self, curr): none
def divide(self, curr): none
def multiply(self, curr): none
def branchzero(self, address): none

def __str__(): Prints memory and accumulator

The virtual machine class is the powerhouse of this program. It stores and processes the code from memory.