1. (4 points) What is the pattern of bits used to represent the integer 937 in BCD?

2. (6 points) If our basic processor begins execution with the first instruction shown below, what value will be in the accumulator after the second instruction is executed? (The list of instructions is given below.)

```
000a   8 023
000c   2 00a
```

What value will be in the program counter?

What value will be in the Instruction Register?

```
0xxx   load ACC with value stored in memory word XXX
1xxx   store value in ACC into memory word XXX
2xxx   add value in memory word XXX to value in ACC
3000   negate the value in ACC
3001   halt
4xxx   change the value of PC to XXX
5xxx   if the value of ACC is zero, change PC value to XXX
6xxx   load ACC with value whose address is stored in word XXX
7xxx   store ACC value into word whose address is in word XXX
8xxx   change ACC value to XXX
9xxx   add XXX to the value in ACC
```