#1. a) Write the SPARC assembly instructions to define the following global variables in the data segment:
   
   char jet[] = "Cold Hard B!!!!!";
   double mint = 103.5;
   short stop = -420;

#2. What is the value (in hex) of \%01 after each set of instructions:

   a) set 0xCAFE5742, \%01  
      set 0xC359C359, \%02  
      btog \%02, \%01  

      Value in \%01 at this point is 0x______________________________

   b) set 0xCAFE5742, \%01  
      sll \%01, 8, \%01  

      Value in \%01 at this point is 0x______________________________

   c) set 0xCAFE5742, \%01  
      set 0xC359C359, \%02  
      or \%01, \%02, \%01  

      Value in \%01 at this point is 0x______________________________

   d) set 0xCAFE5742, \%01  
      sra \%01, 12, \%01  

      Value in \%01 at this point is 0x______________________________

(over)
#3. Write the equivalent unoptimized SPARC assembly language instructions to perform the following C code fragment. Do not use the ba test way of setting up a loop.

```
for ( i = 420; i < 4902; ++i ) {
    x = i / 17;
}
```

x = x + 5;

Now optimize your answer to eliminate any delay slots:

```
Optimized version of above SPARC assembly
```