Tutorial 1

1. Write a sequence of instructions for SIC to set ALPHA equal to the integer portion of BETA ÷ GAMMA. Assume ALPHA and BETA are defined as below.

```
ALPHA    RESW    1
BETA     WORD    32
GAMMA    WORD    5
```

2. Write a sequence of instructions for SIC to find largest out of three numbers and store it at location labelled as MAX. Assume numbers are given in the program as follows:

```
NUM1     WORD    5
NUM2     WORD    17
NUM3     WORD    8
MAX      RESW    1
```

3. Following (portion of) the SIC program copies one 11-byte character string to another

```
         LDX     ZERO
MOVCH    LDCH    STR1, X
         STCH    STR2, X
         TIX     ELEVEN
         JLT     MOVCH
         :
STR1     BYTE    C'TEST STRING'
STR2     RESB    11
ZERO     WORD    0
ELEVEN   WORD    11
```

   (a) Complete the program.

   (b) How many bytes will be needed to store the object program of the completed program?

   (c) How many times memory will be accessed to fetch and execute these instructions?