

### Tutorial 3

1. Find the byte ordering style of different machines/systems.
2. What kind of instruction set architecture do modern processors use?
3. Write MIPS code for the following:

i.       if ( i == j && i == k )  
          i++ ;  
          else  
          j-- ;  
          j = i + k ;

ii.

switch (k)

```
{  
case 0: f=i+j; break; /* k=0*/  
case 1: f=g+h; break; /* k=1*/  
case 2: f=g-h; break; /* k=2*/  
case 3: f=i-j; break; /* k=3*/  
}
```

4. Determine the format for each instruction and the decimal values of each instruction field for the following:

lw \$t1, 26 (\$s1)

add \$s2, \$t1, \$s2

addi \$t2, \$s3, 4 (addi is 8)

sub \$t0, \$s1, \$s2 (sub is 34)