**Multimedia Homework**

**Arithmetic**

Compression ratio of:

M=1:

Sena:

Number of symbols per tag: 1061126

Compression ratio: 2.02394

Sensin:

Number of symbols per tag: 1060272

Compression ratio: 2.02231

Earth:

Number of symbols per tag: 1077990

Compression ratio: 2.0561

Omaha:

Number of symbols per tag: 203049

Compression ratio: 0.387285

M=3:

Sena:

Number of symbols per tag: 677516

Compression ratio: 1.29226

Sensin:

Number of symbols per tag: 677002

Compression ratio: 1.29128

Earth:

Number of symbols per tag: 598304

Compression ratio: 1.14117

Omaha:

Number of symbols per tag: 678393

Compression ratio: 1.29393

M=10:

Sena:

Number of symbols per tag: 1041512

Compression ratio: 1.98653

Sensin:

Number of symbols per tag: 203183

Compression ratio: 0.387541

Earth:

Number of symbols per tag: 203084

Compression ratio: 0.387352

Omaha:

Number of symbols per tag: 203049

Compression ratio: 0.387285

Comment:

as the block size decrease, image decoding & compression becomes better

and as block size increase , image decoding & compression becomes worse (may go under 1 which expands size )