**IICT ASSIGNMENT**

**Task 1**

⇨The maximum range of a 8 bit byte would be:

7 6 5 4 3 2 1 0

1 1 1 1 1 1 1 1

Adding the values in each of the bits we get 255, which is also the maximum range of an 8 bit byte.

⇨The minimum range of a 8 bit byte would be

7 6 5 4 3 2 1 0

0 0 0 0 0 0 0 0

Adding the values in each of the bits we get 0, which is also the minimum range of an 8 bit byte.

**TASK 2**

1. 65536

This number can not be represented using 2 byte notation because the maximum range of 2 bytes is 65535.

1. 196

2nd Byte 1st Byte

0 0 0 0 0 0 0 0 1 1 0 0 0 1 0 0

1. -65535

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

1. -32

0 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0

1. 100015

It cannot be represented.

**TASK 3**

1. 20456

0110010 011000 0110100 0110101 0110110

2.196

0110001 0111001 0110110

3. 1024

0110001 011000 0110010 0110100

4. 32

0110011 0110010

5. 100015

0110001 011000 011000 011000 0110001 0110101