Practical 3

Number Representation

NOTE: Use of internet is not permitted (apart from committing submission to Github, GitLab or BitBucket), calculators are permitted, and your answers must include worked solutions. If you require extra sheet(s) please write your name and student number at the top of each additional sheet. All work should be stored in source control.

Objective

Complete sample exam questions d, e, and f below

(d)
> Detail the computations for subtracting the numbers below in binary utilising 8-bit complimentary addition
> $$32 - 16_{10}$$

(8 marks)

(e)
> Convert hexadecimal number which is a hexadecimal representation of an IEEE Single Precision Floating Point number.
>
> $$C0\ 48\ 00\ 00_{16} \equiv Decimal_{10}$$

(8 marks)

(f)
> Given that the ASCII value for 'A' is 41_{16}, Space is 20_{16} and 'a' is 61_{16} convert the hexadecimal string below into a string
> $$48\ 61\ 6E\ 20\ 53\ 6F\ 6C\ 6F \equiv string_{char}$$

(6 marks)

Commit this practical report at the end of session and ensure it has been checked

Student Name		Student Number	
Date		Checked	
Group	A / B		