Bonus point assignment – week 1

Student number = 566780

Convert your student number to a hexadecimal number and a binary number.

Explain in detail that the calculation is correct. Use the PowerPoint slides of week 1.

My student number is 566780, in order to convert that into binary we keep dividing it to 2 until the point that the output would reach 0.

566780/2 = 283390	remainder = 0
283390/2 = 141695	remainder = 0
141695/2 = 70847	remainder = 1
70847/2 = 35423	remainder = 1
35423 /2= 17711	remainder = 1
17711/2 = 8855	remainder = 1
8855/2 = 4427	remainder = 1
4427/2 = 2213	remainder = 1
2213/2 = 1106	remainder = 1
1106/2 = 553	remainder = 0
553/2 = 276	remainder = 1
276/2 = 138	remainder = 0
138/2 = 69	remainder = 0
69/2 = 34	remainder = 1
34/2 = 17	remainder = 0
17/2 = 8	remainder = 1
8/2 = 4	remainder = 0
4/2 = 2	remainder = 0
2/2 = 1	remainder = 0
½ = 0	remainder = 1

Now we write them from down to up : 10001010010111111100

In order to convert it to hexadecimal we do the same but divide it to 16:

566780/16 = 35423	remainder = 12/c
35423/16 = 2213	remainder = 15/f
2213/16 = 138	remainder = 5

138/16 = 8 remainder = 10/a

8/16 = 0 remainder = 8

Result = 8A5FC