Please write the solution in a text file. Notice that Microsoft word is not a text editor. Examples of text editor are windows Notepad, Notepad plus, Sublime Text, Emacs, Vim and many more. Please search for text editors online and install one if already it is not installed on your computer. Sublime text is one that is cute and handy and it is good to try. Please feel free and use any text editor(code editor) that you like.

1. (35 points) Perform the following calculations, assuming a 24-bit word size. Indicate the presence or absence of overflow. Assume base 16 for all parts.

a) (5 points) Assume unsigned addition: OV   No OV   (circle one)

   3 4 8 2 6 3
+ 7 3 C 6 9 8

b) (10 points) Assume unsigned subtraction: :   OV   No OV   (circle one)

   9 8 E A 7 F
- 8 9 F F 6 3

c) (5 points) Assume two's complement addition: OV   No OV   (circle one)

   3 9 6 F E 2
+ 5 3 8 A A A

d) (15 points) Assume two's complement subtraction: :   OV   No OV   (circle one)

   A 6 8 9 B E
- B 8 F D E 3

2. Floating Point Data Representation (30 points)
Provide the hexadecimal value for the floating point representation of the decimal 6.9. Showing your work facilitates partial credit. Assume the width (word size) W=32.