CMSC 14300 - Summer 2025 — Konstantinos Ameranis
due 7/07/2025 via Gradescope

H2.

Problem 1 (Working with different bases) *For each number $(abcd)_p$ in base p below, convert it to the requested base*

(a) $(123)_{10} = (\quad)_8$

(b) $(CAFE)_{16} = (\quad)_{10}$

(c) $(447)_8 = (\quad)_{16}$

(d) $(1023)_{10} = (\quad)_2$

Problem 2 (Floating point numbers) *Answer the following:*

*(a) What is the decimal real value of the following **single precision floating point** binary number*
0 01111100 01100000000000000000000*?*

(b) What is the largest positive normal single precision number?

*(c) What is the smallest **negative** subnormal double precision number?*

Problem 3 *How many hours did you spend for this assignment?*

Problem 4 *Document your collaboration here.*