Ryan Fahrenkrug

MECH 105 Homework 5 9/4/2017

```
%Although it is not commonly used, MATLAB allows numbers to be
 expressed in single precision. Each value is stored in 4 bytes with 1
 bit for the sign, 23 bits for the mantissa, and 8 bits for the signed
 exponent. Determine the smallest and largest positive floating-point
 numbers for single precision. Express your answer to 5 significant
 digits
%You must be EXACT when you type it into canvas and you must use
 scientific notation with E instead of writing out exponent.
clear
clc
close all
```

Smallest and largest positive floating point numbers for single precision

```
max=realmax('single');
min=realmin('single');
fprintf('The smallest positive floating point number for single
 precision is %1.4e\n',min)
fprintf('The largest positive floating point number for single
 precision is %1.4e\n',max)
```

```
The smallest positive floating point number for single precision is
 1.1755e-38
The largest positive floating point number for single precision is
 3.4028e+38
```

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