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(base) qiang@PC-KW-13330:~/Documents/codefiles/c++code/CS380/cs380-2020/1_assignment$ ./assignment1
Q1: query and print (to console) OpenGL version and extensions:
OpenGL vendor: NVIDIA Corporation
OpenGL renderer: TITAN V/PCIe/SSE2
OpenGL Version: 4.6.0 NVIDIA 440.95.01

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Q2: query and print GPU OpenGL limits (using glGet(), glGetInteger() etc.):
maximum number of vertex shader attributes: 16
maximum number of varying floats: 124
number of texture image units in fragment shader: 32
number of texture image units in vertex shader: 32
number of 2D texture size: 32768
number of 3D texture size: 16384
number of draw buffers: 8

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Q3: query GPU functionality we need for CUDA, return false when not available:
Device(s): 2
device NO.: 0
device name: TITAN V
compute capability: major: 7, minor: 0
multi-processor count: 80
clock rate (KHz): 1455000
total global memory (Gb): 11.78
shared memory per block: 49152
num registers per block: 65536
warp size (in threads): 32
max threads per block: 1024
device NO.: 1
device name: TITAN Xp
compute capability: major: 6, minor: 1
multi-processor count: 30
clock rate (KHz): 1582000
total global memory (Gb): 11.91
shared memory per block: 49152
num registers per block: 65536
warp size (in threads): 32
max threads per block: 1024
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OpenGL Version 4.6
framebuffer_callback: x 533, y 522
framebuffer_callback: x 570, y 542
framebuffer_callback: x 569, y 543
framebuffer_callback: x 566, y 543
framebuffer_callback: x 569, y 544
framebuffer_callback: x 618, y 546
cursorposcallback: x 177, y 2
cursorposcallback: x 168, y 4
cursorposcallback: x 163, y 5
cursorposcallback: x 154, y 7
cursorposcallback: x 149, y 7
cursorposcallback: x 145, y 7
cursorposcallback: x 138, y 9
cursorposcallback: x 132, y 10
cursorposcallback: x 127, y 12
cursorposcallback: x 122, y 13
cursorposcallback: x 117, y 15
cursorposcallback: x 113, y 19
cursorposcallback: x 110, y 22
cursorposcallback: x 109, y 25
cursorposcallback: x 109, y 28
cursorposcallback: x 109, y 30
cursorposcallback: x 109, y 31
cursorposcallback: x 109, y 33
cursorposcallback: x 109, y 35
cursorposcallback: x 109, y 36
cursorposcallback: x 110, y 37
cursorposcallback: x 110, y 38
cursorposcallback: x 110, y 39
cursorposcallback: x 110, y 40
cursorposcallback: x 110, y 39
cursorposcallback: x 111, y 39
mousebutton_callback: button 0, action 1, action 1, mods 0
mousebutton_callback: button 0, action 0, action 0, mods 0
mousebutton_callback: button 1, action 1, action 1, mods 0
mousebutton_callback: button 1, action 0, action 0, mods 0
key_callback: key 32, scancode 65, action 1, mods 0
key_callback: key 32, scancode 65, action 0, mods 0
scroll_callback: x 0, y -1
scroll_callback: x 0, y -1
scroll_callback: x 0, y 1
scroll_callback: x 0, y 1
scroll_callback: x 0, y 1
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