1) What is your name? (2 pts)

2) With respect to the short ethics article, describe one ethical problem with respect to child care/elder care. Write this in 2-3 sentences. (3 pts)

* Long term social & mental effects (childcare)
* Elder care: leave the work to robots, when they need human attention

3) Chapter 3 lists many sensors or things to sense. List 10 (5 pts)

- Position
- Encoder
- Velocity \rightarrow accelerometer, ultrasonic, positional
- Acceleration \rightarrow accelerometer
- Load/stress \rightarrow strain gauge, pressure sensor, load cell
- Temperature \rightarrow resistance, dissimilar metal, IR
- Battery charge \rightarrow ADC meter
- Failure
- Olfaction \rightarrow pH, chemical
- Audition \rightarrow mic, light
- Touch \rightarrow capacitive, resistive, switches, bump sensors
- Slipage
- Taste
- pH
- Proximity \rightarrow Sonar, IR, GPS, light, Lidar
- Vision \rightarrow Camera, Lidar, light
- Current use
- Load on a motor \rightarrow current

\[ V = IR \]
\[ SV = I \times 10.12 \]
\[ S_{\text{max}} A = I \]