Software Descriptions

Base Device
- initialize hardware such as ports, usart, and usb
- wait for USART receive interrupt to change value of mousebuttondata, mousemovementdata, and keyboarddata
- match the received data with the necessary usb transmission packets
- send the prepared packets to PC via usb

Glove Device
- initialize hardware such as ports, usart, and ADC
- read flex sensor values. to do this, toggle the select lines of the analog multiplexer using PORTC and then store the value of the appropriate flex sensor to its respective flex variable
- read accelerometer values and then store them into their respective variable
- prepare the data to be transmitted to the glove device
- if accelerometer values match the appropriate conditions, change the value of mousemovementdata
- if flex values of left and right click match the appropriate conditions, change the value of mousebuttondata
- if flex values of flex sensors related to keyboard strokes match the appropriate conditions, change the value of keyboarddata
- transmit mousedowndata, mousebuttondata, and keyboarddata to base device via USART