**Step 1: Download and Install WinAVR**

* Download WinAVR from the official Source Forge page [https://sourceforge.net/projects/winavr/](%20https://sourceforge.net/projects/winavr/)
* Run the installer and follow the on-screen instructions to install WinAVR. Make sure to note the installation directory.

**Step 2: Install USBASP Driver**

* Download the USBASP driver from <https://deviceinbox.com/drivers/913-usbasp-isp-usb-programmer-for-atmel-avr-controllers-drivers.html.>
* Follow the driver installation instructions provided on the website. This typically involves running an installer executable and connecting the USBASP programmer when prompted.

**Step 3: Download and Install progISP**

* Download progISP from the provided link: <https://www.phippselectronics.com/support/prog-isp-software/>
* Extract the downloaded ZIP folder to a location on your computer.

**Step 4: Connect Hardware**

* Connect the USBASP programmer to a USB port on your computer.
* Connect the USBASP programmer to the target AVR microcontroller using the appropriate connectors.

A computer screen shot of a computer screen

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**Step 5: Flashing Code**

* Open the progISP software you extracted earlier.
* In progISP, select the USBASP programmer from the available options.
* Load your HEX file in progISP.
* Connect the USBASP programmer to the target AVR microcontroller.
* In progISP, select the target AVR microcontroller model from the supported devices list.
* Erase the microcontroller's flash memory using the "Erase" button in progISP.
* Program the microcontroller with your HEX file using the "Program" button in progISP.
* Verify the programmed code against the HEX file using the "Verify" button in progISP.
* Once programming and verification are successful, disconnect the USBASP programmer from the microcontroller.

A screenshot of a computer

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