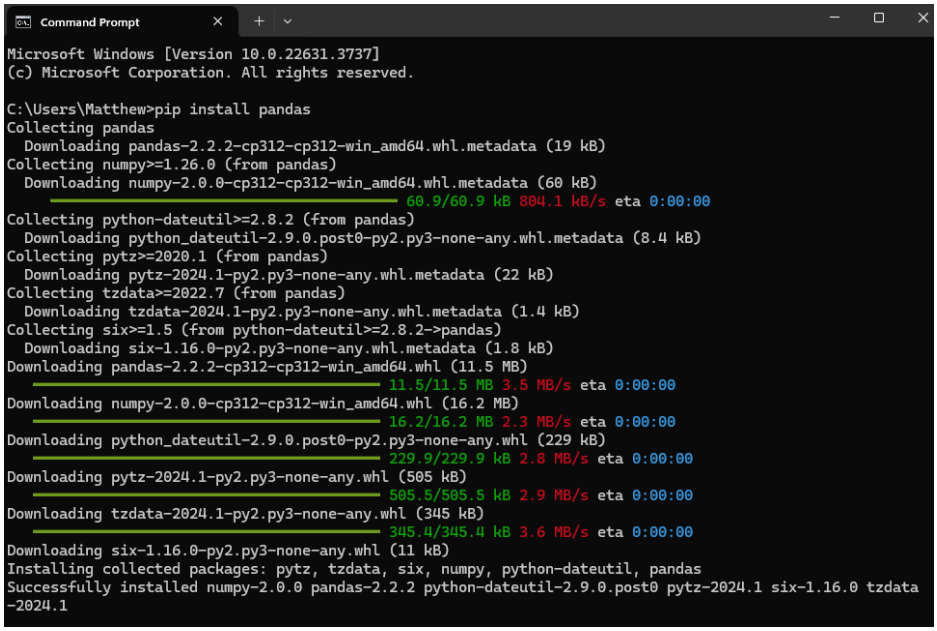
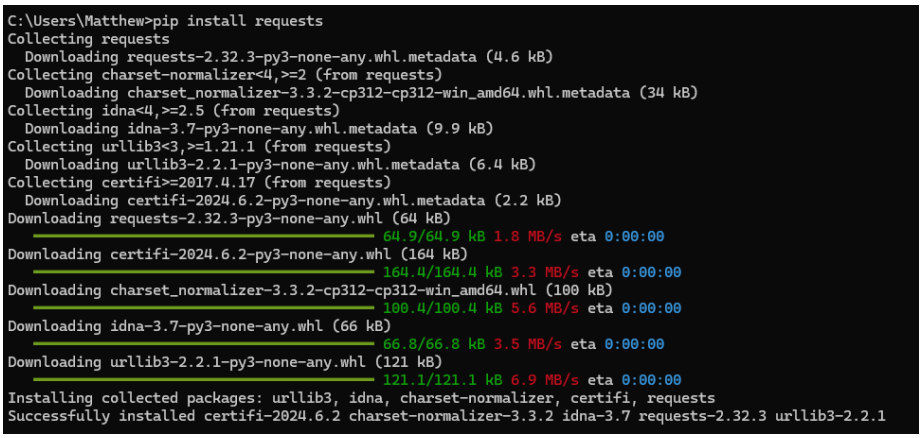
1. Install python from https://www.python.org/downloads/
   whe n asked by the sinall if you want python added to your environment variables, check the box to say yes. If you forget, you can run the installer a second time (after completing the install) and select “Modify”, followed by selecting the box to set environment variables.

2. Before running the script you’ll need to install the appropriate python libraries **pandas** and **requests.** This is done from a windows command line using the commands
   pip install pandas
   pip install requests



INSTALLING PANDAS



INSTALLING REQUESTS

3 Now you can run the script with the command

Py CreaterepeaterCSV.py

You should get afew lines of response (including a couple of warning s about deprecated methods that I have yet to fix) followed by

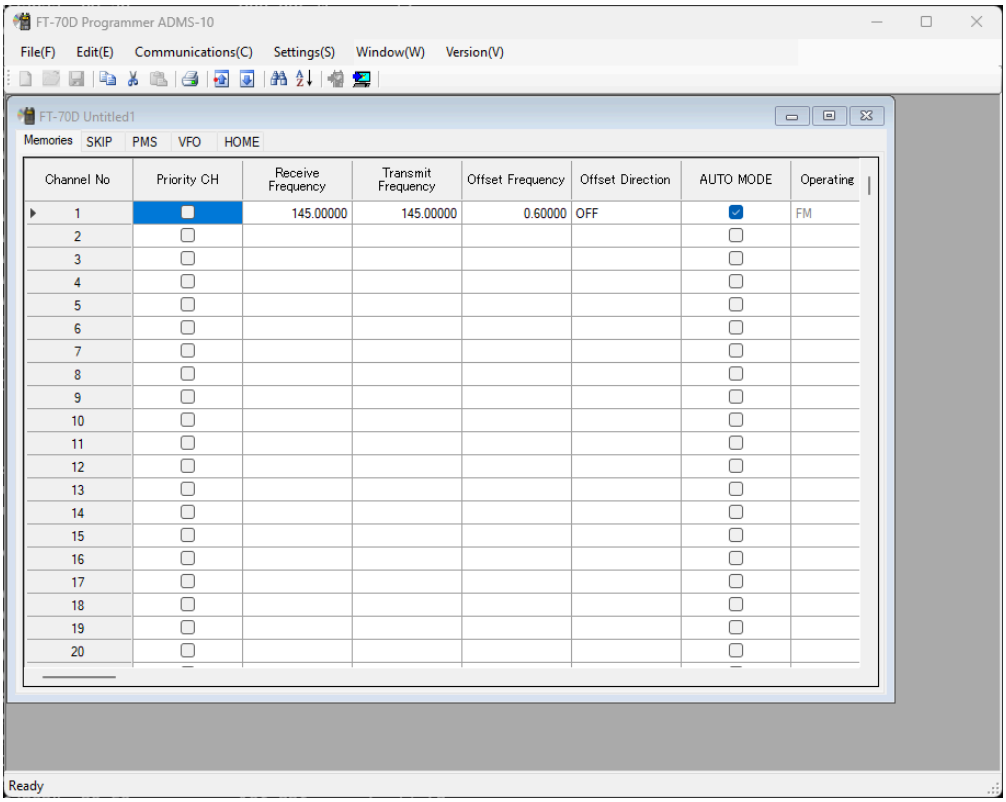
Processing complete. CSV files have been created

You now have three CSV files, saved in the directory in which you ran the code
FT5DE_List.csv This is the CSV file for uploading to the FT5DE ADMS software
FT70DE_List.csv This is the CSV file for uploading to the FT70D ADMS software

The FT5DE AMDS software also provides options to convert files to be suitable for the FT300, so this file can also be used for the FT300

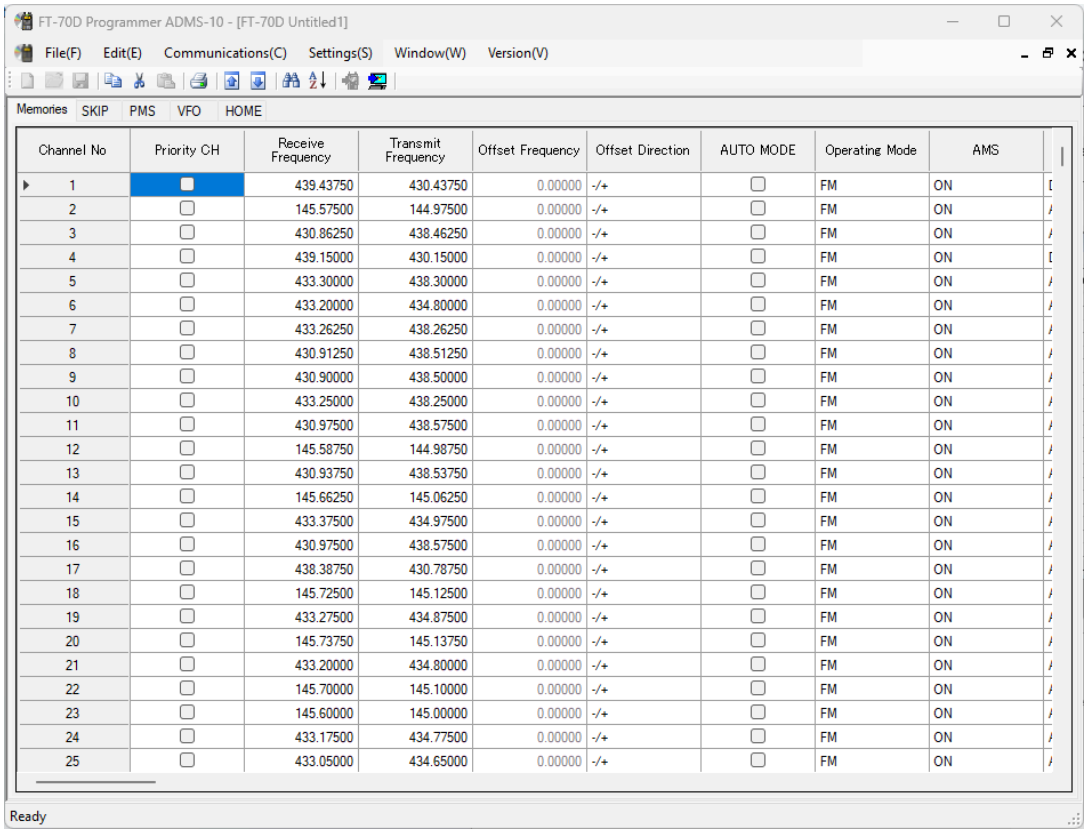
4 Install the Yaesu ADMS software for the FT5DE or FT70D - available on the Yaesu website.
FT5DR/FT5DE Programming Software ADMS-14 (Ver.1.0.1.0)
FT-70DR/DE Programming Software ADMS-10 Instruction Manual (2211-C)
FT-70DR/FT-70DE ADMS-10 Programming Software (Ver.1.0.1.0)

5 OPen the ADMS Program - we will use the FT70D as an example, you will be greeted by the following window



6 Select File -> Import

In the dialogue box that appears, select the FT70DE_List.CSV file you created in step 3. This will import the CSV file into the ADMS programme. You will now have a window as shown below



Channel No	Priority CH	Receive Frequency	Transmit Frequency	Offset Frequency	Offset Direction	AUTO MODE	Operating Mode	AMS
1		439.43750	430.43750	0.00000	-/+		FM	ON
2		145.57500	144.97500	0.00000	-/+		FM	ON
3		430.86250	438.46250	0.00000	-/+		FM	ON
4		439.15000	430.15000	0.00000	-/+		FM	ON
5		433.30000	438.30000	0.00000	-/+		FM	ON
6		433.20000	434.80000	0.00000	-/+		FM	ON
7		433.26250	438.26250	0.00000	-/+		FM	ON
8		430.91250	438.51250	0.00000	-/+		FM	ON
9		430.90000	438.50000	0.00000	-/+		FM	ON
10		433.25000	438.25000	0.00000	-/+		FM	ON
11		430.97500	438.57500	0.00000	-/+		FM	ON
12		145.58750	144.98750	0.00000	-/+		FM	ON
13		430.93750	438.53750	0.00000	-/+		FM	ON
14		145.66250	145.06250	0.00000	-/+		FM	ON
15		433.37500	434.97500	0.00000	-/+		FM	ON
16		430.97500	438.57500	0.00000	-/+		FM	ON
17		438.38750	430.78750	0.00000	-/+		FM	ON
18		145.72500	145.12500	0.00000	-/+		FM	ON
19		433.27500	434.87500	0.00000	-/+		FM	ON
20		145.73750	145.13750	0.00000	-/+		FM	ON
21		433.20000	434.80000	0.00000	-/+		FM	ON
22		145.70000	145.10000	0.00000	-/+		FM	ON
23		145.60000	145.00000	0.00000	-/+		FM	ON
24		433.17500	434.77500	0.00000	-/+		FM	ON
25		433.05000	434.65000	0.00000	-/+		FM	ON

7 You can now upload this to the FT70D. You can do his using the USB cable that came in the box with your FT70D. Simply connect it between the radio and the PC, and and use *Communications -> Send Data to to FT70* in the ADMS program. Before uploading to your FT70D you will need to install the appropriate drivers and set the COM port correctly, theer are plenty of instructional videos on this online

For the FT5D (and FT300 and FT200) a simpler process can be used by making use of the SD card. The ADMS software offers the option of saving memories to the SD card (remove the micro SD card from the radio and insert into your PC, and use a a USB drive). Again, there are plenty of instruction videos online showing how to do this stage.

Improvements to implement

- Setup memory banks for the FT70d to divide the repeaters by geographical areas
- Allow of a user created CSV file of non-repeater memory channels to be imported and added to the repeater list. The user could then have details of their own local gateway, or of favourite net frequencies in a user created CSV file (just listing the basic stuff, with the more complex settings optional). This file is read and merged into the final CSV file
- Add an option to insert the calling channel every between every *n* memory channels. This would then mean that if the radio is set to scan the memory channels, it will be checking the calling channel every second or so. This is helpful on the FT70D because dua watch does not function when sanning.