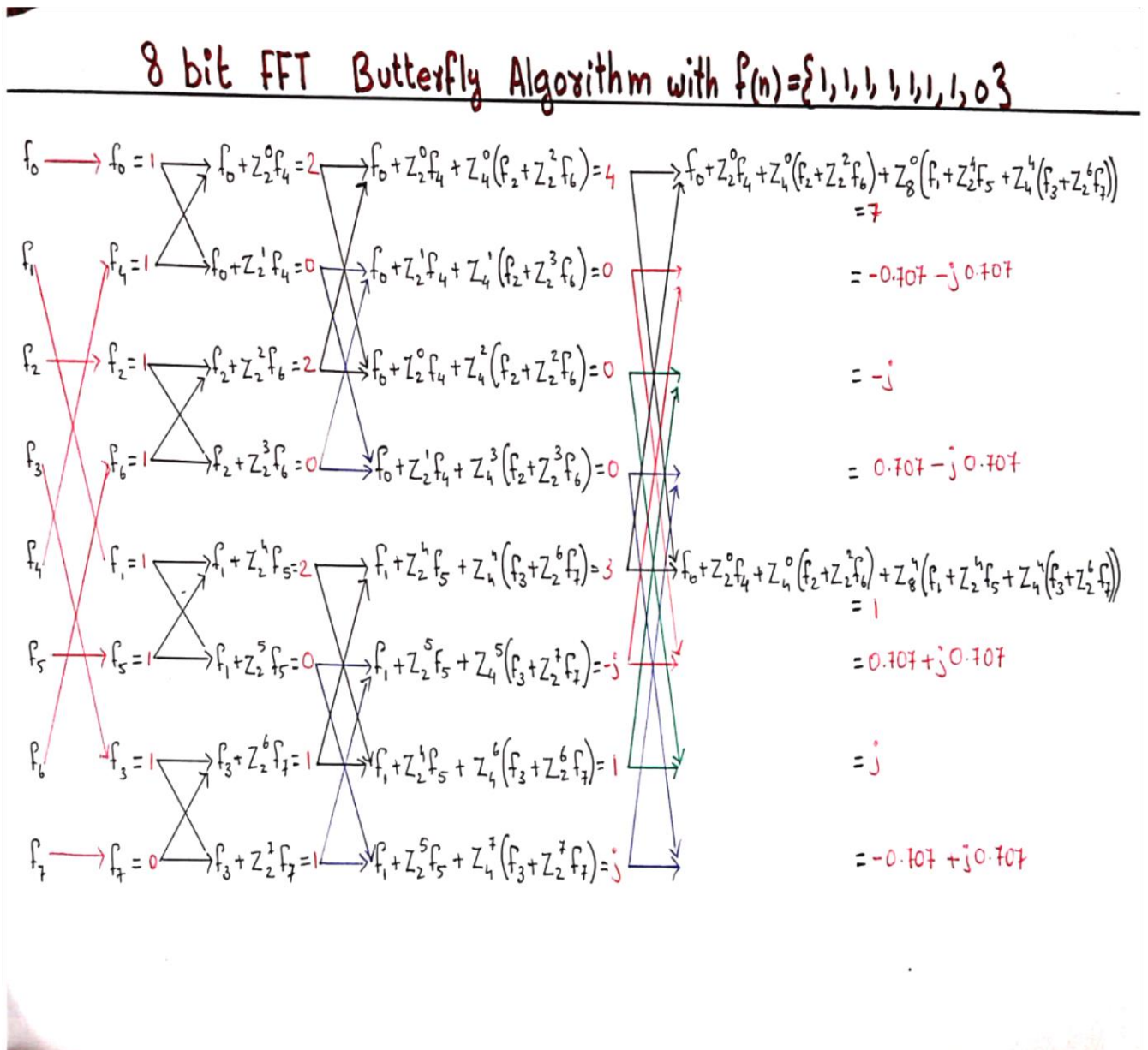


Fourier Evesdropping – 6B

Example problem for testing the code for 8 bit FFT:



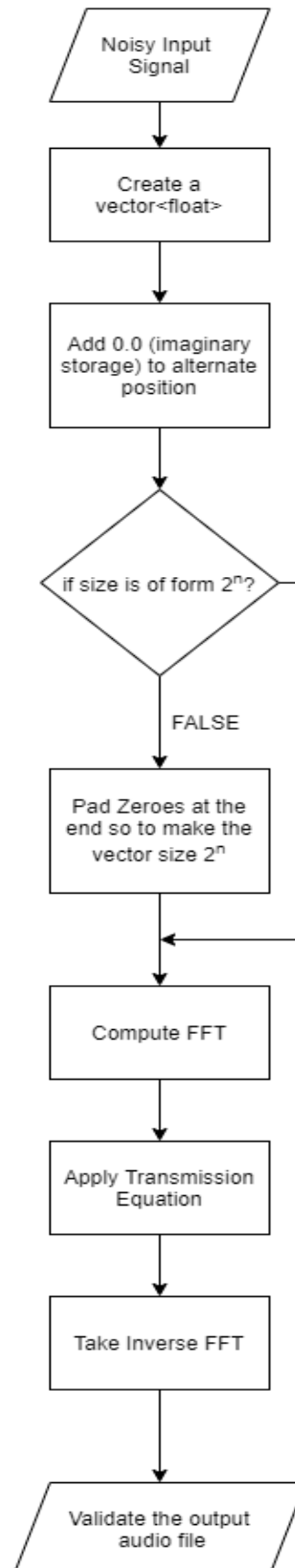
On running our program, we get below output :

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\lenovo\Desktop\audio_denoise> ./main.exe
Lines in the input file: 8
file size: 16
Initial Size :: 8
Added alternate imaginary values : 16
Nearest Power Of Two : count : 5 num : 16
To be filled places :: 0
Size after padding with 0 :: 16
Logging input data :
1 + 0i
1 + 0i
1 + 0i
1 + 0i
1 + 0i
1 + 0i
1 + 0i
1 + 0i
0 + 0i
*****
Logging output data :
7 + 0i
-0.707107 + -0.707107i
3.92481e-017 + -1i
0.707107 + -0.707107i
1 + 0i
0.707107 + 0.707107i
-3.92481e-017 + 1i
-0.707107 + 0.707107i
*****
Took inverse of the data.
Erasing the padded Zeroes.
Original size with imaginary : 16
Padded size with imaginary : 16
FINAL SIZE : 16
PS C:\Users\lenovo\Desktop\audio_denoise> |
```

Flow Chart for code :

Flow chart for main.cpp



Code can be found at below github repo/zipped file:

https://github.com/subhash3008/fft_project1