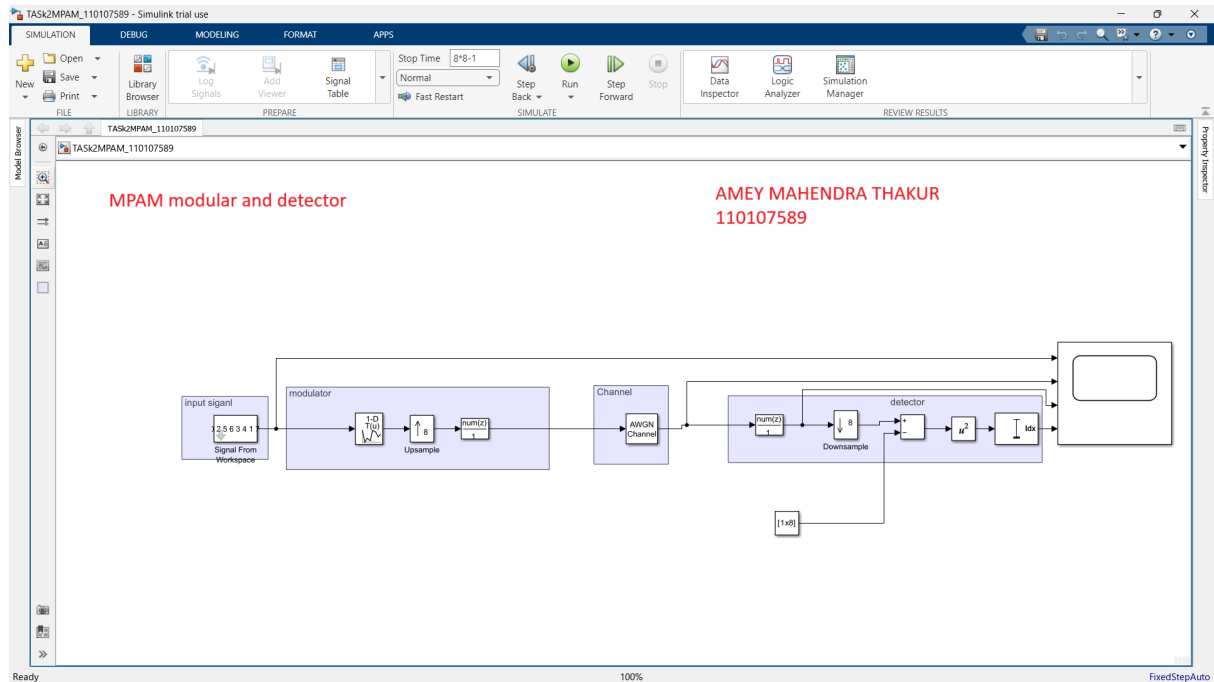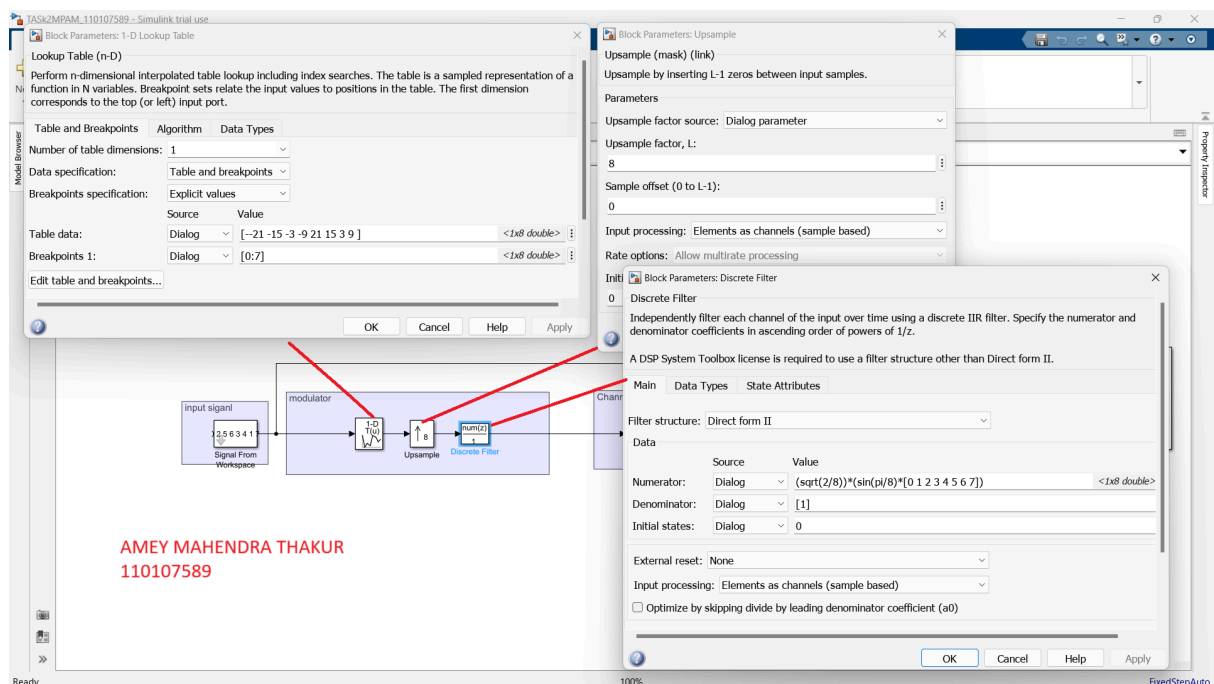# Task 2
MPAM System Design & Subtask - 2
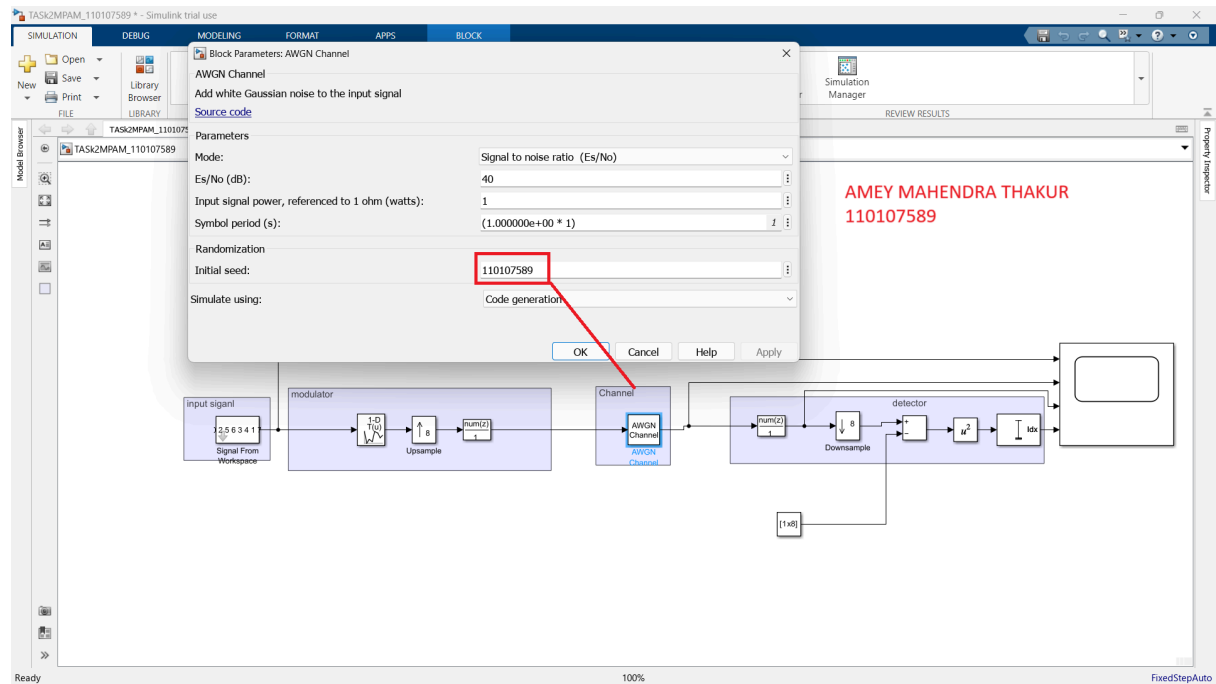
MPAM system design:
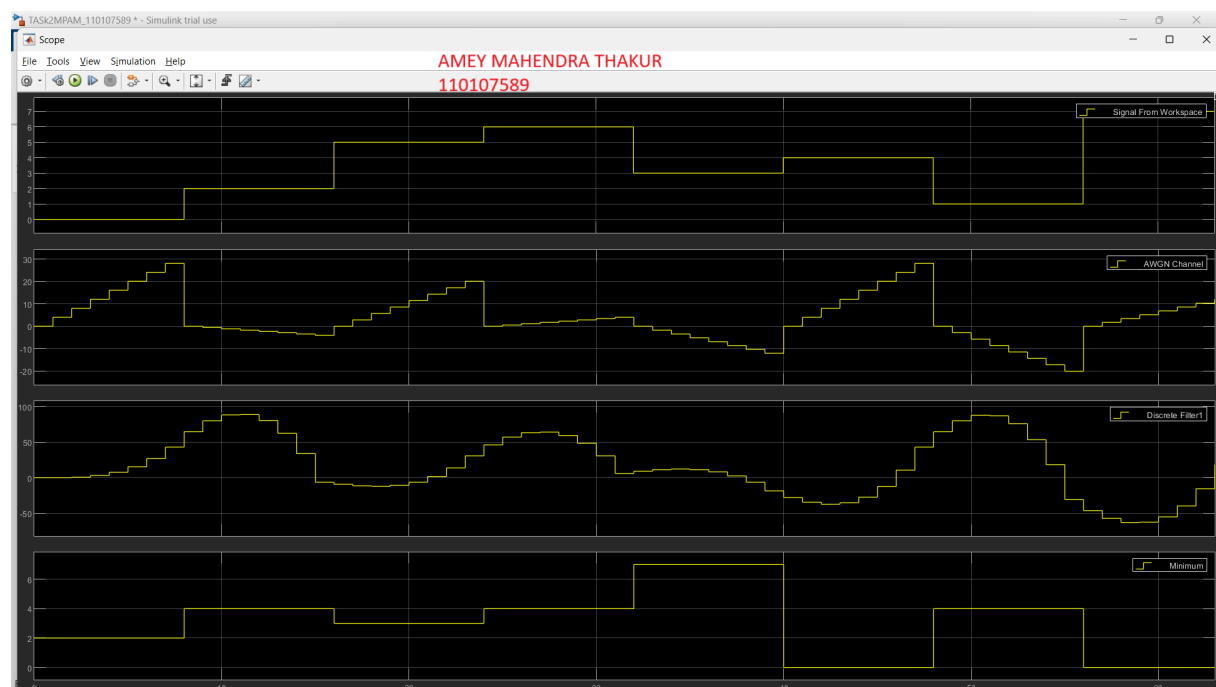
Modulator and detector design:

Modulator design parameters:

AWGN channel parameters:

Scope output:

Subtask - 2

In subtask-2, I used the second file, pam8data, as the input signal, and the detector used is identical to MPAM.

Workspace window commands:

Upon executing the simulation with the specified configuration, a variable named "yout" was generated, containing 71 ASCII characters from the output of the filter. Following the instructions, 70 characters were selected and decoded using the provided command. Screenshots is provided for the process.

```
>> pam8data(110107589)
>> load('pam8signal.mat')
Warning: The timeseries Variable Editor will be removed in a future release
>> sys_msg = out.yout.data(2:end);
>> ascii_msg = char(bin2dec(num2str(reshape(dec2bin(sys_msg,log2(2)).', 7, []).'))).'

ascii_msg =

    'You can do this more than once'

fx >>
```

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