1D advection in-class exercise:

1. Complete the code for advection in x direction using two versions (if else and np.absolute(u) forms)
2. Run the code
3. Rerun the code by setting u[:,:,:] = 5.0
4. Rerun the code by setting u[:,:,:] = 12.0
5. Rerun the code by setting u[:,:,:] = -5.0

Additional exercises:

Add similar codes to vertical advection. Setting periodic boundary conditions in the vertical also, following the following code for horizontal boundaries:

```
theta[t+1,:,0] = theta[t+1,:,nx-2]
theta[t+1,:,nx-1] = theta[t+1,:,1]
```

Run the code by setting

u[:,:,:] = 10.0
w[:,:,:] = 10.0