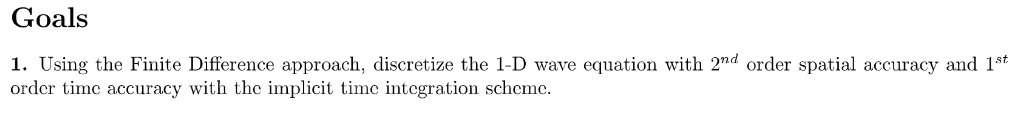
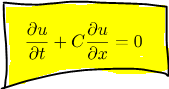
**Question: 1**



**Goal 1 Solution**

Equation to be solved:

…………. Eq(1)

NOTE :

Suffix used below represent the following:

i represent x(space)

j represent t(time)

h = ∆x

k = ∆t

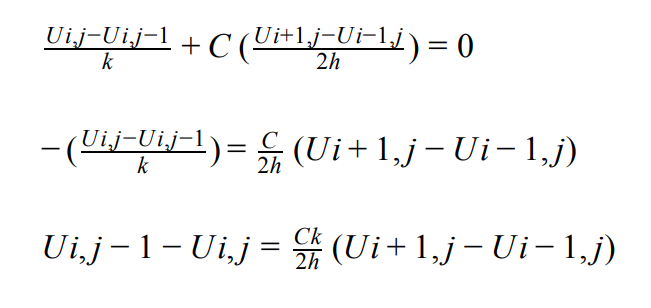
Order accurate spatial:

……….. Eq(2)

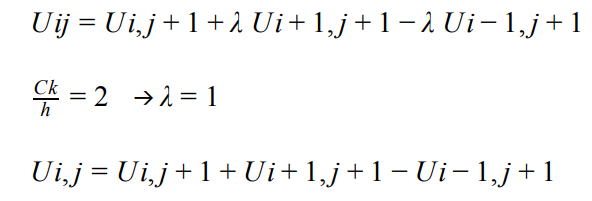
Order accurate time derivative:

………….Eq(3)

Putting (ii) & (iii) in (i) we get



Replace j to j + 1 and = λ



**RESULT:**

**eq5.PNG**