

# Debugging hts

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```
ε1 = .; ε2 = 1; ε3 = 1; ε4 = ε3; ε5 = 1;
UU[expr_] // hts[y_, x_] := S[UU[Expand[expr /. {
  a[f_, i_, j_] =>
    a[f, i, j] - Kδj,y γ[∂bxf, i, y] - Kδ1,x Kδj,y (β[f bx] + c[f, y] - δβ[bx ∂bxf]),
  δa[f_, x, y] => δa[f, x, y] - δβ[f bx],
  ca[f_, i_, j_, k_] =>
    ca[f, i, j, k] + ε5 Kδ1,y Kδj,x γ[f, x, k] + Kδj,x Kδk,y c[-f bx, i],
  δaa[f_, i_, j_, k_, l_] => (* Likely problem here! *) δaa[f, i, j, k, l] +
    ε4 Kδ1,x Kδj,y δa[-bx f, k, l] + ε3 Kδ1,x Kδ1,y (-δa[bx f, x, j] + δa[bx f, k, j]) +
    ε1 Kδk,x Kδj,y (δa[b1 f, x, l] - δa[bx f, i, l]) +
    ε2 Kδk,x Kδ1,y δa[-bx f, i, j] + Kδ1,x Kδj,1,y δβ[b1 bk f]
}]]];
```

