* **ROLL NO. - 210100166 CLASS – D3/T4**
* In weak-0, I learnt about uncertainty principle of Heisenberg which is **Δx Δp >h/4π**, planks equation **E= K.E. + Φ**, by Davisson–Germier experiment gives mλ = 2dsinθ, De Broglie wavelength and Schrodinger’s philosophy about particle and wave. We also got wave number K = 2π/λ. Finally, we get Schrodinger equation TDSE - **iħ ∂ψ/∂t = Hψ =[− ħ2/2m ∂2/ ∂x2 + V (x) ] ψ**. I also understood about eigenfunction and eigen value of Schrodinger eqn. from lecture, All the eigenfunction of Q.M. operators are orthogonal (**<ψm / ψn\*> = 0** for m≠ n and **(<ψm / ψn\*> = 1** for m = n).In this week I also learn about normalisation of function **(<ψ / ψ\*> = 1**) and I also understand about what is the restrictions on wave functions, In free Particle there are no external force act on particle so net force on particle equal to zero so **v(X) = 0** in Schrodinger equation.
* In particle in 1-D Box, there are two infinite wall at x=0 and x=L and we get boundary condition **ψ(0)=0** and **ψ(L)=0** and we get eqn. of wave function for particle in box is **√2/L sin nπx/L where n=1,2,3…** and we get energy expression **En = nh2/8mL2** then I learn about expectation value from lecture.