So, my project is about using an Op Amps to solve a differential question but first I think I should explain to you what an Op Amp or op amps is. Op Amps stand for Operational amplifier . And its job in an IC or an ingrated circuit is to amplify weak signals or voltages when you have things like capacitors and resistors are connected to in and out points on OP amp. Something that is interesting by Op Amps is that essential component when it come analog devices because it allows a person to many different operations and that’s the reason why people in the electronics world give the name Op amps (operational amplifier). One of the reasons op amps can be used for math or for differential equations is because op amps are components are linear components that be used to solve mathematical operations like adding ,subtracting , integration and differentiation which again is the focus of this project and as filter and for conditioning signals. Op amps have amplifier like an inverter, inverter summing amplifier and inverter integration amplifier and their other amps you can use in a circuit . You might be reading this paper and don’t understand what any of those words mean so I am going to explain them. Inverter amplifier is just inverting the voltage output or the gain from inputs of the circuit. An inverting summing amplifier is a Variation of an inverting amplifier that was moded to a summing amplifier and this allows you inputs or resistors in parallel that can be connected to one of inputs to get one voltage output when each outputs are being added to each other and then they are inverted .Then you have a integration amplifier is an amplifier that gives out a output voltage that is proportional to the input signal or resistor that is being connected to the to this types of amplifier . So, an inverting integration amplifier because you are inverting the input signals or resistor that are connected to these types of amplifiers where it causes the output voltage to be proportional to negative input signals or resistors .So now that you have a basic understanding of op amps, we will use to solve a differential equation. So, enable to solve a differential equation using op amps you need you need second order differential and need an inverter op amp that is connected to a inverting summing op amp and two inverting integration amps. So, for example I can use the equation d^2V/dt^2+50dv/dt+150v-50v. which would translate to d^2v/dt=-50dv/dt-150v+50v. To solve this, you need to build the circuit from what it is being understand to the differential equation. So, the reason you have plus 50 v is because a summing op amp needs three inputs so that it causes the result of the equation to inverted when the first order derivative is being added with 150v. One things to under is that the input of 50 v that being connected to inverting summing amp has a gain of 1.which maybe doesn’t affect the differential equation that we are feeding into the op amps. Also, something that happens to both integrator amps is that we give each one a gain of -1 when you design the op amps using the differential equation that was given as our example equation. One thing that would be added to this essay the block diagram of the op amps when the circuit is build.