# USER MANUAL:

This  project will help you plot the graphs of a wide range of functions in your choice of domain. One can also find the integral/area bounded by a function  in a given domain. Besides you can also find the value of derivative of a function at a given point of your choice. Our project also involves the facility of finding the REAL roots of any arbitrary cubic equation and finding the roots of any quadratic equation.

On the screen, you will see the options for graph plotting, differentiator, integrator,  and  equation solver. Choose the option which you want to be performed. .

*NOTE-If you want to use differentiator ,integratoror equation solver use the project named menufinal1.cbp file

*NOTE-If you want to plot the graph use the menufile2.cbp project .

If you want to plot a graph, just enter the function(as per the format specified below) which you want to plot and the interval in which you want to plot the graph.

If you want to use the integrator , you will be given 2 choices-to either find the definite integral or to find the area of the function . Just enter the corresponding choice number. Then you must enter the function(as per the format specified below)  and the interval in which you want to find its integral/area.

If you want to use the differentiator, just enter the function(as per the format specified below) which you want to differentiate and the point at which you want its derivative.

If you want to use the equation solver, choose between quadratic equation and cubic equation. Just enter the coefficients of the cubic equation/quadratic equation with non-zero leading coefficients(i.e a should be non-zero).


One has to use the following format to enter a function:

NOTE THERE MUST NOT BE ANY SPACES BETWEEN ANY TWO CHARACTERS.

->To enter a positive integral power (n) of x , type ^n( . For instance, if you want to enter x^2, type ^2(.

->To enter a negative integral power(-n ,n>0) of x, type ^_n( (NOTE THE UNDERSCORE SYMBOL). For instance, if you want to enter x^2, type ^_2( .

->To enter square root of x, type sr(.

->To enter a polynomial of x , type the desired power separated by + or – sign. So if one wants to enter x^4+x-x^3, he must type ^4(+^1(-^3->To enter sine(x), type sin( .

->To enter cosine(x), type cos( .

->To enter tangent(x), type tan( .

->To enter cosecant(x), type csc( .

->To enter secant(x), type sec( .

->To enter cotangent(x), type cot( .

->To enter exp(x), type e^( .

->To enter log(x), type log( .

->To enter modulus(x), type mod(.

->To enter a linear combination, product, division  of more than one class of functions, type the desired functions separated by +,-,*,/  operators. For instance if you want to enter sine(x)*cosine(x)+log(x)*x^2, type sin(*cos(+log(*^2(.

->To enter a composition of more than one functions, type the corresponding functions one after the other without any operator in between. For  instance, if you want to enter sin(log(x^2)), type sin(log(^2(.

For this part, just enter the co-effecients of x^3, x^2, x^1 and the constant term.