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Algebra Solver

             Our project is an algebra solver. The idea is to input a polynomial function and the program will do the symbolic manipulation of equation, generating the roots, the integration and the derivation of the function. For example, if we input (x+1)\*(x+2) , the program can generate:

·       simplification:   x^2+3x+2

·       roots:   x = -1 , x=-2

·       integration:  x^3/3+(3 x^2)/2+2 x+constant

·       derivation:  2 x+3

The inputs must be simple polynomial functions with 2nd degree and will accept cos, sin and exponential functions.

SEARCH ONLINE: HOW TO READ THE POLYNOMIAL FUNCTION

List of Classes:

class equation{

// readin an equation:

equation( const char\* str);

simplification();

roots();

integration();

derivation();

}

each function will be separated in one file;

We haven’t  found the way to store the equation which is easy to handle in each function;

c. A list of classes, and what each class is supposed to represent.  Each statement should be a single sentence (no more than 20 words).  If you have a very complicated description for one class, it is probably too complicated.

Github repository: https://github.com/songnansn/solver