

1. **Main Class**- might contain methods for parsing input equations and dispatching them to appropriate solver classes.
2. **Linear equations Class** - This class handles linear equations of the form  $ax + b = 0$ . It should provide methods to solve single linear equations and systems of linear equations.
3. **Quadratic class** - Handles quadratic equations of the form  $ax^2 + bx + c = 0$ . This class should provide methods to solve single quadratic equations and handle complex roots.
4. **Polynomial Class** - Handles polynomial equations of degree higher than two.
5. **Trigonometric Class**
6. **Exponential Class**- Handles equations involving exponential functions like  $e^x$ .
7. **Logarithmic Class** - Handles equations involving logarithmic functions like  $\log(x)$ .