 **Start**

 **Ask the user what type of equation they want to solve**

* Quadratic, Cubic, or Quartic

 **If Quadratic Equation**:

* Get values for a, b, c
* Calculate the discriminant (b² - 4ac)
* If discriminant > 0: Compute two real roots
* If discriminant == 0: Compute one real root
* If discriminant < 0: Compute two complex roots

 **If Cubic Equation**:

* Get values for a, b, c, d
* Compute intermediate values (p, q, discriminant)
* Find real or complex roots using the cubic formula

 **If Quartic Equation**:

* Get values for a, b, c, d, e
* Compute intermediate values (p, q, r)
* Reduce it to a quadratic form and solve for roots

 **Display the roots**

 **End**