while True:

Display menu options:

"1. Calculate the roots of a quadratic equation"

"2. Calculate the roots of a cubic equation"

"3. Calculate the roots of a quartic equation"

Get user input for the option (1, 2, or 3)

if option is 1:

Get coefficients a, b, and c for the quadratic equation from the user

Calculate the discriminant

If discriminant > 0:

Calculate the roots using the quadratic formula

Display the roots

ElseIf discriminant == 0:

Calculate the repeated root

Display the repeated root

Else:

Calculate the complex roots

Display the complex roots

ElseIf option is 2:

Get coefficients a, b, c, and d for the cubic equation from the user

Calculate the discriminant

If discriminant > 0:

Calculate the roots using the appropriate method

Display the roots

ElseIf discriminant == 0:

Calculate the repeated root

Display the repeated root

Else:

Calculate the complex roots

Display the complex roots

ElseIf option is 3:

Get coefficients a, b, c, d, and e for the quartic equation from the user

Calculate the discriminant

If discriminant > 0:

Calculate the roots using the appropriate method

Display the roots

ElseIf discriminant == 0:

Calculate the repeated root

Display the repeated root

Else:

Calculate the complex roots

Display the complex roots

Else:

Display "Invalid option selected!"

Ask user if they want to perform another calculation (yes/no)

If user says no, break the loop