

First, I write a function to properly printed out the equation. Making sure when it printed zero wouldn't be negative zero, and plus and minus symbol wouldn't show up at the same time. This equation will have a maximum two roots. So, I use equation1 and equation2 to record these numbers. To judge if they will have two roots or one. I use  $b^2 - 4ac$  to represent discriminant. When it equal zero it will only have one root, and when it is larger than zero it will have two roots. I also write if equation equal zero it prints out zero because it might print out minus zero. Complex roots will have imaginary quantity. I use R to record real quantity and i to record imaginary quantity. So, when I printed out the roots, two of them will be separated.