**Introduction:**

**Ramanujan Method:** It is a method of iterative procedure to determine the smallest root of the equation. Srinivasa Ramanujan first described it.

Let the equation

a1x+ a2x2+ a1x3+……………..=1

or,1-( a1x+ a2x2+ a1x3+……………..)=0

to find the smallest root of *f(x)=0*,we consider *f(x)*in the form

*f(x)*= 1-( a1x+ a2x2+ a1x3+……………..)

and then write

[1-( a1x+ a2x2+ a3x3+……………..)]-1=b1+ b2x+ b3x3…………

=>1+( a1x+ a2x2+ a3x3+…..)+( a1x+ a2x2+ a3x3+…..)+……….= b1+ b2x+ b3x3……..

To find the value of bi, we equate coeffi