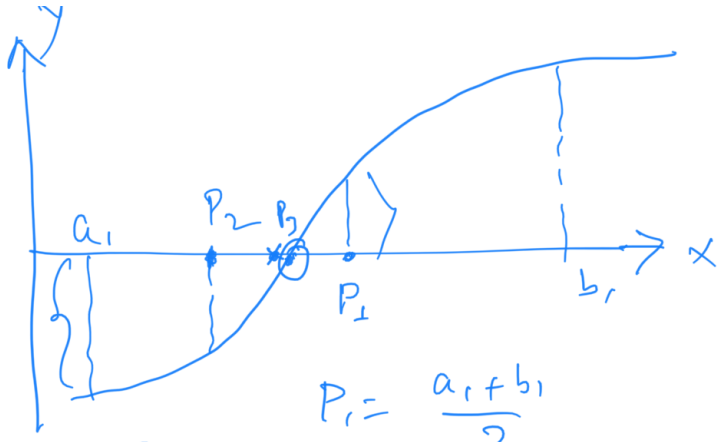

$$p_1 = \frac{a_1 + b_1}{2}$$

If, $f(a_1) f(p_1) < 0 \rightarrow$ ✓

$b_2 = p_1$

$a_2 = a_1$

$f(b_1) f(p_1) < 0$

$a_2 = p_1$

$b_2 = b_1$

$$p_2 = \frac{a_2 + b_2}{2}$$

$f(b_2) f(p_2) < 0$

$a_3 = p_2$

$b_3 = b_2$

$$p_3 = \frac{a_3 + b_3}{2}$$

$$diff = \left| \frac{b_n - a_n}{2} \right| ; \quad diff < TOL$$

$TOL = 10^{-4}$