

```

In[60]:= ClearAll;
RegulaFalsi[a0_, b0_, m_] :=
Module[{a = N[a0], b = N[b0]},
c = (a * f[b] - b * f[a]) / (f[b] - f[a]);
k = 0;
While[k < m,
If[Sign[f[b]] == Sign[f[c]],
b = c,
a = c;];
c = (a * f[b] - b * f[a]) / (f[b] - f[a]);
k = k + 1;
Print["Value at ", k, "th iteration is = ", NumberForm[c, 16]];
];
];
RegulaFalsi[0, 1, 10];
f[x_] := x^3 - 5 x + 1;

Value at 1th iteration is = 0.2025316455696203
Value at 2th iteration is = 0.2016543345503893
Value at 3th iteration is = 0.2016399160896553
Value at 4th iteration is = 0.2016396796646341
Value at 5th iteration is = 0.2016396757880281
Value at 6th iteration is = 0.2016396757244643
Value at 7th iteration is = 0.201639675723422
Value at 8th iteration is = 0.201639675723405
Value at 9th iteration is = 0.2016396757234046
Value at 10th iteration is = 0.2016396757234047

```