**DIVERGENCE IN FIXED POINT ITERATION**

With the question’s requirement, it looks as if the solution is converging using this method. However, if more iterations and more decimal places are used, the solution is diverging instead.

The table on the previous page shows results when the code is run for 35 iterations, and the values between the 20th and 35th iterations are looked at. It can be seen that the values fluctuate between 1.5329978 and 1. 5329977. The reasons for this are:

1. **The root between 0 and 2 is a local minimum => the code keeps iterating around that point**
2. **The function fails to satisfy the convergence criteria:**

Now, to test h(x)

**ANALYTICAL SOLUTION**