**Q4.1**

All intervals were successful and we can tell because the error resulted in zero. It is not possible to find the root x=0 because the function does not change since at zero. It goes from negative, zero, to negative; therefore, we cannot find the root using bisection method.

**Q4.2**

A: is successful because the error messages read zero. Therefore, we have reached our desired accuracy.

B: is not successful and this was expected because there is no zero in the interval a=0 and b=2. Therefore, we did not achieve the desired accuracy.

C: This behavior I expected because there is no zero for sin in-between 0.5 and 3pi/4. The code was successful for a=0 and b=0.1 because there is a zero. We can tell because our error is 0. This also means we reached the desired accuracy of 10e-5. For a=0.5 and b=3pi/4, the code failed because there is no zero in the interval. We can tell because the error is 1. This means we did not reach the desired accuracy of 10e-5.

**Q4.3**

A: 7^(1/5) is a fixed point because the error output message read zero.