Assignment Day 4

Question 1

Soln:

First of all, beg + (end - beg)/2 works even if you are using pointers, as long as end - beg doesn't overflow.

Second of all, beg+end/2 won't overflow if beg and end are large positive numbers

So, it is suggested to calculate the mid as beg+(end-beg)/2

Question 2

Q. function for Ternary Search

Soln:

```
double ternary_search (double l, double r) {
    double eps = 1e-9;

    while (r - l > eps) {
        double m1 = l + (r-l)/3;
        double m2 = r - (r-l)/3;

        double f1 = f(m1);
        double f2 = f(m2);

        if (f1 < f2)
            l = m1;
        else
            r = m2;
    }
    return f(l);
}
```