C-2.2

```
/**
 * Progression where each value is the absolute value of the difference
 * between the previous two values
 **/
class AbsValProgression : public Progression {
protected:
    long second;                        // second value of progression
    long prev;                          // previous value of progression

    long firstValue() {                 // resets to the first value
        cur = first;
        prev = first + second;
        return cur;
    }
    long nextValue() {                  // advances to the next value
        long temp = cur;
        if (prev > cur) cur = prev − cur;
        else            cur = cur − prev;
        prev = temp;
        return cur;
    }
public:
                                        // constructor
    AbsValProgression(long val1 = 2, long val2 = 200) {
        first = val1;
        second = val2;
    }
};
```