Histogram LAB 2

**public** **class** Histogram {

**public** **double** maxLimit;

**public** **double** minLimit;

**public** **int** numCounters;

**public** **int**[] buckets;

Histogram(**int** numCounters,**double** maxLimit,**double** minLimit){

**this**.numCounters = numCounters;

**this**.maxLimit = maxLimit;

**this**.minLimit = minLimit;

buckets = **new** **int**[numCounters];

**for**(**int** i = 0;i<numCounters;i++){

buckets[i] = 0;

}

}

Histogram(**double** maxLimit,**double** minLimit){

numCounters = 10;

**this**.maxLimit = maxLimit;

**this**.minLimit = minLimit;

buckets = **new** **int**[numCounters];

**for**(**int** i = 0;i<numCounters;i++){

buckets[i] = 0;

}

}

**public** **void** add(**double** x){

**double** interval = (maxLimit-minLimit)/numCounters;

**int** bucket = 0;

**double** lower = minLimit;

**double** upper = minLimit + interval;

**while**(!(lower<=x && x<upper)){

bucket ++;

lower = upper;

upper = upper + interval;

}

buckets[bucket]++;

}}

----------------------------------------------------------------OUTPUT------

10109

10056

10065

10009

9968

9980

9769