Given an array of numbers, where i represents the model i and A[i] represents the percentage with which model ‘i’ should be called, write an api to take the array as input and return a random model id as per given array of percentages. For example:

Input Array:

66.123 8.877 23.234 1.766

1 2 3 4

Probable Output:

2

2

1 .. so on.

Counter % 100

1) 66.123

2) 75

3) 98.223

4) 100

Class Scheduler {

Int[] rangeUpperLimit;

Static int counter;

Scheduler( int[] percent ) {

if(percent.length == 0)

return;

rangeUpperLimit = new int[percent.length];

Int sum = 0;

For( int i = 0; i < percent.length; i++) {

Sum += percent[i];

rangeUpperLimit[ i ] = sum;

}

This.counter = 0;

}

Int findModel(int hash) {

Int low = 0;

Int high =rangeUpperLimit.length; // 4

while(low < high) {

Int mid = ( low + high ) / 2; // 2

if(mid == 0)

Return 1;

if( hash > rangeUpperLimit[mid-1] && hash <= rangeUpperLimit[mid])

Return mid;

Else if( hash > rangeUpperLimit[mid])

Low = mid +1

Else

High = mid - 1

}

}

Int scheduler( ) {

hash = Math.random(1,100);

Return findModel(hash);

}

}