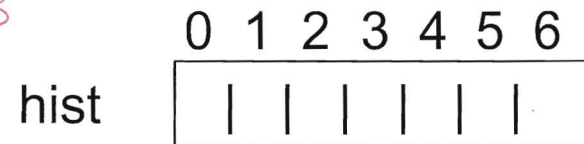


Another Exercise *Lecture 3*

```
class CoinFlip {
    static boolean heads()
    { return Math.random() < 0.5; }
    public static void main(String[] args)
    { int i, j, cnt;
      int N = Integer.parseInt(args[0]);
      int M = Integer.parseInt(args[1]);
      int [] hist = new int[N+1];
      for (j = 0; j <= N; j++) hist[j] = 0; } N
      for (i = 0; i < M; i++, hist[cnt]++) }
        for (cnt = 0, j = 0; j <= N; j++) } M * N
          if (heads()) cnt++;
      for (j = 0; j <= N; j++) {
        if (hist[j] == 0) system.out.print("."); } N
        for (i = 0; i < hist[j]; i+=1) } max M
          system.out.print("*");
        system.out.println(); }}}
```



hist[j] is the count of how many of the M trials got j heads

What is the max number of heads you can get in M trials?

*M * N*

*2(M * N) + N*

*O(M * N)*