

AP COMPUTER SCIENCE A – `Math.random ()` – CLASS WORK

Previously, when we generated lists of random numbers, we made instances of a `java.util.Random` object. On the AP test, though, you will be asked about random numbers in terms of the `static double random ()` method of class `java.lang.Math`. For example, executing

```
double d=Math.random();
```

will supply `d` with a random number such that $0.0 \leq d < 1.0$. Note that there is no “seeding” involved, as we did previously.

In any case, the goal of this class work assignment is to write a program `RandomList.java`, which when run, the console will look like

```
positive int = ? 25
```

where the bold print is user input. This will produce an output file (called `list_25.txt`) which contains all of the integers between 0 and 24 (inclusive) ordered randomly.

- 1) Use `RandomListStub.java` as a starting point. Note that the constructor calls `init ()`.
- 2) Supply the needed code to `init ()` which initializes the private field `int [] list` to contain the list of random integers. Use `Math.random ()`, not a `java.util.Random` object.
- 3) Show me your code and the output file.