Diceware

Background

Diceware is a method for creating passphrases, passwords, and other cryptographic variables using ordinary dice as a hardware random number generator. [DICE] In this assignment you will design and implement a password generator using the diceware method.

Task

In Java, implement the provided interface, **`DicewareInterface.java`**. Details for implementation are provided as javadoc comments in the file. This file specifies the use of the Electronic Frontier Foundation cryptographic word list file. [EFFWordList]

Write a **`main`** function to generate and print passwords/passphrases (one per line) of minimum length ranging from 1 to 25. Use '@' as the separator character. Your output should look similar to the following:

```
inlay
free
hinge
genre
harem
pie@raul
tiber@veery
atop@down
roof@fray
hookup@swarm
wee@caine@nut
mali@nx@braid
elgin@klm@bring
admix@buret@shine
jason@2001@tried
terse@duty@randy
bcd@hun@loren@hamal
tom@jan@94th@mulct
cohn@append@gc@2020
yyy@monic@melon@aloft
morel@pal@prow@ionic
gaul@genie@marin@focus
ap@acrid@wispy@truth@mh
we'll@hadron@mealy@circa
lobo@gyro@mad@knew@aqua@feel
```

Note that the passwords shown above are only examples and are not the expected values.

Deliverables

1. Source code file(s)
2. Report
    a. Description of degree of success and any difficulties you experienced
    b. Screen shot of results from running the program