



< Previous



Next >

## Intro

🔖 Bookmark this page

In this problem set, you'll implement *two* versions of a wordgame!

Don't be intimidated by the length of this problem set. There is a lot of reading, but it can be done with a reasonable amount of thinking and coding. It'll be helpful if you start this problem set a few days before it is due!

Let's begin by describing the 6.00 wordgame: This game is a lot like Scrabble or Words With Friends, if you've played those. Letters are dealt to players, who then construct one or more words out of their letters. Each **valid** word receives a score, based on the length of the word and the letters in that word.

The rules of the game are as follows:

**Dealing**

- A player is dealt a hand of *n* letters chosen at random (assume *n*=7 for now).
- The player arranges the hand into as many words as they want out of the letters, using each letter at most once.
- Some letters may remain unused (these won't be scored).

**Scoring**

- The score for the hand is the sum of the scores for each word formed.
- The score for a word is the sum of the points for letters in the word, multiplied by the length of the word, plus 50 points if all *n* letters are used on the first word created.
- Letters are scored as in Scrabble; A is worth 1, B is worth 3, C is worth 3, D is worth 2, E is worth 1, and so on. We have defined the dictionary SCRABBLE\_LETTER\_VALUES that maps each lowercase letter to its Scrabble letter value.
- For example, 'weed' would be worth 32 points ((4+1+1+2) for the four letters, then multiply by len( 'weed' ) to get (4+1+1+2)\*4 = 32). Be sure to check that the hand actually has 1 'w', 2 'e's, and 1 'd' before scoring the word!
- As another example, if *n*=7 and you make the word 'waybill' on the first try, it would be worth 155 points (the base score for 'waybill' is (4+1+4+3+1+1+1)\*7=105, plus an additional 50 point bonus for using all *n* letters).

**Sample Output**

Here is how the game output will look!

PSET4: Intro

Topic: Sandbox / PSET4: Intro

Hide Discussion

Add a Post

Show all posts ▼by recent activity ▼

There are no posts in this topic yet.



# edX

- [About](#)
- [Affiliates](#)
- [edX for Business](#)
- [Open edX](#)
- [Careers](#)
- [News](#)

# Legal

- [Terms of Service & Honor Code](#)
- [Privacy Policy](#)
- [Accessibility Policy](#)
- [Trademark Policy](#)
- [Sitemap](#)

# Connect

- [Blog](#)
- [Contact Us](#)
- [Help Center](#)
- [Media Kit](#)

