Scrabble is a word game where the goal is to accumulate points, based on a random draw of the letter

The distribution point for, English language, letters are the following

- **1 point: E, A, I, O, N, R, T, L, S, U**
- **2 points: D, G**
- **3 Points: B, C, M, P**
- **4 points : F, H, V, W, Y**
- **5 points : K**
- **8 points : J, X**
- **10 points : Q, Z**

You have 2 files :

- The first file is the list of words played by a player, named playedwords.txt
- The second file contains the list of forbidden words in scrabble, named dictionary.txt

Create a Program, using java 8 and best programming practice to answer the following problems

1. Write a function to calculate the score of the word “Hello”

Hello => has score 8

2. Verify that the word “whizzing is the best word played by the player

Playedwords.txt, dictionary.txt =>
best word is “whizzing” with score 33

3. Create histogram of words that has the same score (group the words by score)

Playedwords.txt, dictionary.txt =>
For score 33 we have 1 word
For score 28 we have 9 words
For score 16 we have 360 words
For score 8 we have 1459 words
For score 2 we have 26 words
Histogram size is 29

4. Give the words that are the best 3 scores

Playedwords.txt, dictionary.txt =>
33: “whizzing”
29: “buzzards”
28: “mazzard”, “dazzling”, “grizzled”, “puzzled”, “unmuzzle”, “drizzled”, “muzzled”, “buzzard”, “buzzing”

5. (Optional) Modify the score function considering the letters number of available letters in the game. That is:

1 lettre : D, J, K, Q, X, Z
2 letters: B, C, F, H, M, P, V, W, Y
3 letters: G
4 letters: L, S; U
6 letters: N, R, T
8 letters: O
12 letters: E

To calculate **"whizzing"** score: w(4) + h(4) + i(1) + z(10) + z(0) +i(1) + n(1) + g(2) = 23

To calculate **"delated"** score: d(2) + e(1) + l(1) + a(1) + t(1) + e(1) + d(0) =7

"squeezes" has score 26
"quickly" has score 25
"whizzing" has score 23
"buzzards" has score 19
"delated" has score 7