

2.4 Problem set

Problem 2.4.1. Fill the code in the program `carray.cpp`. Write test programs in `carraytest.cpp` routine to test your code.

Problem 2.4.2. This is an assignment problem for my 3rd grade daughter at Tom Matsumoto Elementary School, San Jose, CA.

Problem: The cost of each letter is given in the table below. Find a SINGLE LEGAL WORD (that must be in a dictionary) such that the total cost of the word is EXACTLY 25\$.

Example:

begin 5.17
beginner 7.42
beginners 7.57

The cost of each alphabet is as follows:

a = 1.00\$
b = 0.01\$
c = 0.02\$
d = 0.03\$
e = 2.00\$
f = 0.04\$
g = 0.05\$
h = 0.06\$
i = 3.00\$
j = 0.07\$
k = 0.08\$
l = 0.09\$
m = 0.10\$
n = 0.11\$
o = 4.00\$
p = 0.12\$
q = 0.13\$
r = 0.14\$
s = 0.15\$
t = 0.16\$
u = 5.00\$
v = 0.17\$

2.4. PROBLEM SET

w = 0.18\$

x = 0.19\$

y = 6.00\$

z = 0.20\$

Write a *class* called **TomMatsumoto** that can print words that satisfies the above requirements.