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# **C++ String Practice**

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Computer Programming for Engineers

Week 11

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# Problem #1: Words Replacement - Description

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Write a program that reads in a line of text and replaces all four-letter words with the word "love". For example, the input string

- **I hate you, you dodo!** -> I love you, you love!

Of course, the output will not always make sense. For example, the input string

- **John will run home.** -> Love love run love.

- Note that :

- If the four-letter word starts with a capital letter, it should be replaced by "Love", not by "love". You need not check capitalization, except for the first letter of a word.
- A word is any string consisting of the letters of the alphabet and delimited at each end by a blank, the end of the line, or any other character that is not a letter.

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# Problem #1: Words Replacement – Input/Output

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## [ Input ]

2 # The number of case below

I hate you, you dodo!

John will run home.

## [ Output ]

I love you, you love!

Love love run love.

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# Problem #1: Sentence of Chemist - Description

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Write a program that determines whether a given sentence is represented by element symbols. Is this sentence represented by element symbols?

- I am Simon

This is right. “I” is Iodine, “Am” is Americium, “Si” is Silicon, “Mo” is Molybdenum and “N” is Nitrogen.

Note that:

- Do not consider capital letter and blank in given sentence.(there is no capital letter and blank)
- You should use string class. Do not use char type.

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# Problem #1: Sentence of Chemist - Description

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H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	*	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	**	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn		Fl		Lv		
*	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu		
**	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr		

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# Problem #1: Words Replacement – Input/Output

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## [ Input ]

2 # The number of case below

imsimon

iamsmart

## [ Output ]

Case #1

yes

Case #2

no