

## **Autolab Instructor Tutorial**

### **Build and Set Autograder**

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submission: <https://autolab.en.kku.ac.th>

Q1. What is a programming language we will use in this course?

[hint: you don't need any hint. It is too easy.]

Q2. Write down 4 key hardware components of a computer.

[They are CPU, memory, input, and output. Write them in order and write each a line.]

Q3. Fuel efficiency. Estimate fuel efficiencies (in km/L) of the following vehicles:

Vehicle a runs 700km for 50L of gasoline.

Vehicle b runs 200km for 12L of gasoline.

Vehicle c runs 28 miles for 8L of gasoline.

Vehicle d runs 50 miles for 1gal of gasoline.

Calculate using 1 mile = 1.60934 km and 1 gallon = 3.78541 liters.  
Round the answers to 2-digit precision.

P4. Write a C++ program to print out:

Aloha, fellows. I am really happy.

P5. Write a C++ program ask for a user's name and reflect it back, as shown in the example,

Name: *Kubo*

Hello, *Kubo*.

Use the exact word and pay attention to all the details (including space and punctuation marks).

P5. Write a program to print out:

... what I type inside the quote is printed out  
exactly ... with a space; with double spaces  
withoutanyspace ...

Example:

```
=====
```

... what I type inside the quote is printed out  
exactly ... with a space; with double spaces  
withoutanyspace ...

```
=====
```

P6. Write a program to ask a user: "Hey, how's your class? "

Example:

```
=====
```

Hey, how's your class? *The best.*

```
=====
```

A ***bold-italic*** font indicates what a user might type in.

*Caution! space matters.*

P7. Write a program ask a user: 'What do you like most at school? ' and reflect it back.

Example:

=====

What do you like most at school? ***Computer Programming***

I am glad you like *Computer Programming*

=====

A ***bold-italic*** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Note! You'll get partial credit if you do hard code! There are more test cases than the example here.*

P8. Write a program to ask a user favorite number and reflect it back.

Example:

=====

What is your favorite number? **8**

8 is a good number.

=====

A ***bold-italic*** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.