

VIET NAM NATIONAL UNIVERSITY HO CHI MINH CITY
HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING



Course name h

Report type h

Report title h

Advisor: Advisor h

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Member list & Workload

No.	Full name	Student ID	Percentage of work
1	h	xxxxxxx	100%



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1 Normal section

This is how you normally work with L^AT_EX, but you can also split a project into smaller files for easier management. To import other files, you can use `\input{}` or `\include{}`. There differences can be found at <https://tex.stackexchange.com/a/250>, but in short

```
\include{filename} = \clearpage \input{filename} \clearpage
```



2 Better tables

The recommended way is by using the booktabs package and drop all vertical rules.

Tabularx is simply tabular but with X environment, meaning that it will try to use all of `\linewidth`.

	OOP	FP
Pros		
Cons		

More information can be found at <https://latex-tutorial.com/tables-in-latex/>.



3 Better enumerator

Normal enumerator gets the job done, but what if you want custom numbering? This implementation allows custom labeling, either by pre-defined rules or in-place.

a.yeah First item

b.yeah Second item

custom Third item

4 Codeblocks

There are several ways to embed code in a L^AT_EX file. Here are inline code, embedded codeblock, and external import.

- External import

```
1 class iostream:
2     def __lshift__(self, other):
3         print(other, end='')
4         return self
5
6     def __repr__(self):
7         return ''
8
9
10 if __name__ == "__main__":
11     cout = iostream()
12     endl = '\n'
13     cout << "Hello" << ", " << "World!" << endl
```

- With custom line range

```
1 if __name__ == "__main__":
2     cout = iostream()
3     endl = '\n'
4     cout << "Hello" << ", " << "World!" << endl
```

- Embedded

```
1 class iostream:
2     def __lshift__(self, other):
3         print(other, end='')
4         return self
5
6     def __repr__(self):
7         return ''
```

- Inline

```
print('Hello, world!')
```

You can also define your custom inline as <https://tex.stackexchange.com/a/148479>.

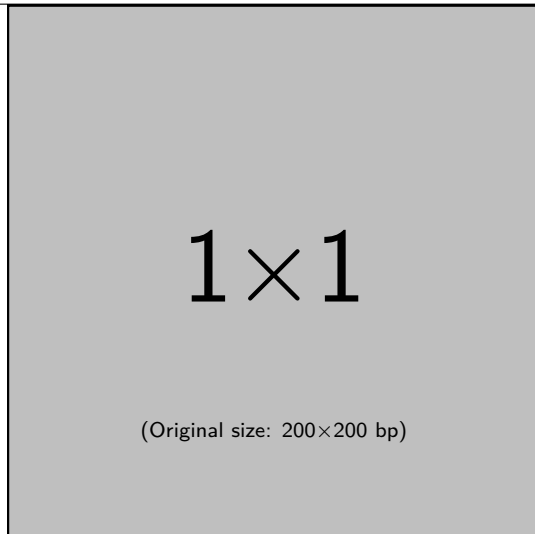
This is one way to input algorithms.



- 1 Initialize Q -table values ($Q(s, a)$) arbitrarily;
- 2 Initialize a state (s_t);
- 3 Repeat Steps 4 to 6 until learning period ends;
- 4 Choose an action (a_t) for the current state (s_t) using an exploratory policy;
- 5 Take action (a_t) and observe the new state ($s_t + 1$) and reward ($r_t + 1$);
- 6 Update Q -value;

Algorithm 1: QL algorithm

5 Figures with flexible width



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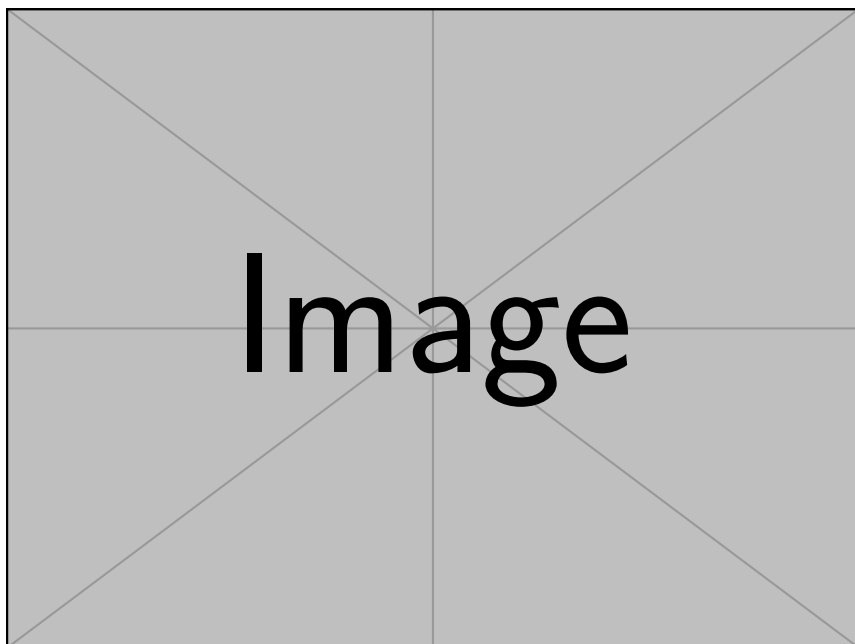
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With `\adjoincluegraphics` (or `\adjustimage`) you can also use the original width as `\width`:





References

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