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

HO CHI MINH CITY, OCTOBER 2022

Member list & Workload

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

Contents

1 Normal section

This is how you normally work with LaTeX, 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 LaTeXfile. Here I demonstrate inline code, embedded codeblocks, and external import.

This version of embedded code uses a custom environment defined in the main file. You can expand this environment instead of using `code` as well.

```
  class iostream:
      def __lshift__(self, other):
          print(other, end='')
          return self

      def __repr__(self):
          return ''


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

```
class iostream:
    def __lshift__(self, other):
        print(other, end='')
        return self

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        return ''


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

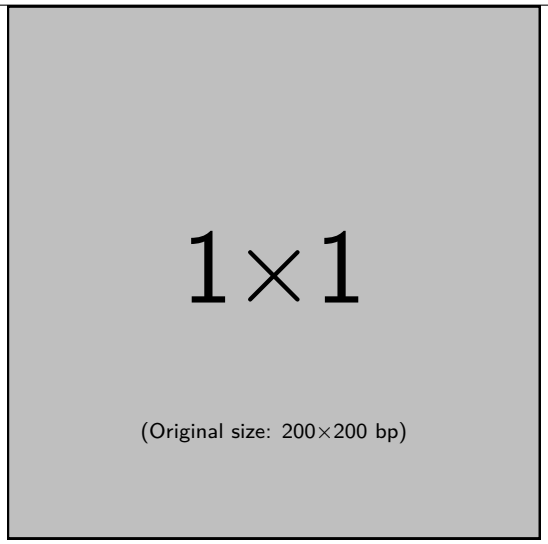
You can also define your custom inline as https://tex.stackexchange.com/a/148479.

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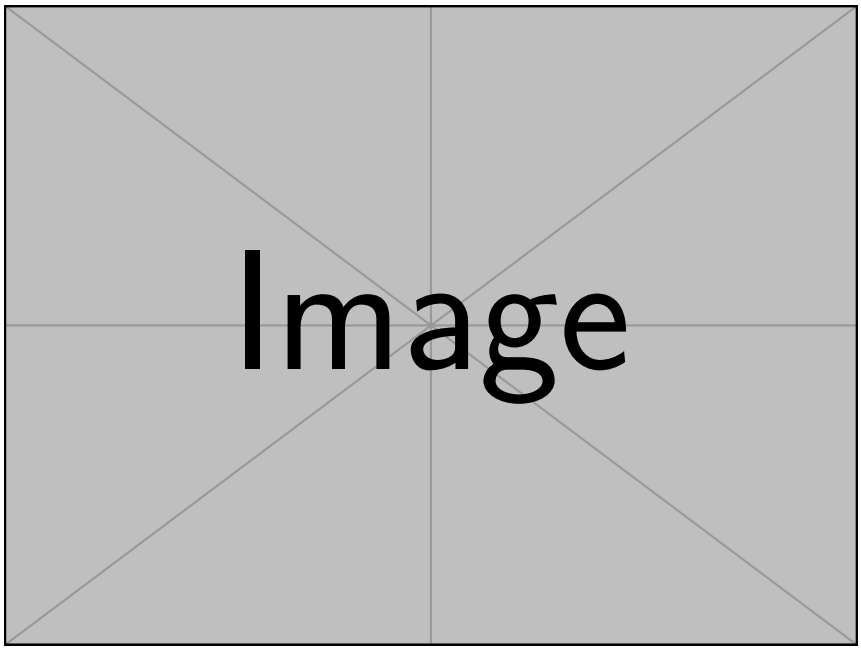
With `\adjincludegraphics` (or `\adjustimage`) you can also use the original width as `\width`:



Image

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[2] Donald E. Knuth. *The TEX Book*. Addison-Wesley Professional, 1986.

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