



Temasek Junior College
2022 JC1 H2 Computing
Practical 3 – Commenting Your Code

Session Objectives

By the end of this session, you will learn:

- (i) what is a block comment.
- (ii) what is an inline comment.
- (iii) how to comment on your code.

§3 Comments

When you have not looked at something which you had coded some time ago, you might wonder “What does this section of code do?” It can be a challenge to remember why you code the way you did. The same can also happen if you are reading code done by others or when you share your code with others.

To avoid this problem, you can leave **comments** in your code. **Comments** are lines of text included within the code as:

- explanation to the why rather than the how of the program logic.
- program headers for identifying critical information such as file name, purpose of the file, author and copyright license information, version number etc.
- documentation to improve understanding of the program code.

Comments are not processed when the code is executed, hence they do not affect the way a program runs.

It is good programming practice to include comments as you code. **In H2 Computing, it is mandatory to include comments deemed necessary to explain your code.**

§3.1 Writing Comments

In Python, comments begin with the # character. When you code is executed, lines preceded by the # character are not processed.

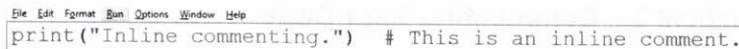
Comments that start on a new line before the actual code commences on another line are called **block comments**.

When using block comments, the comment must be on the same indentation spacing as the code beneath it (**see Fig 1**).

```
File Edit Format Run Options Window Help
# This is a block comment.
print("The block comment is on the same indentation spacing as this code")
```

Fig 1. Block Commenting

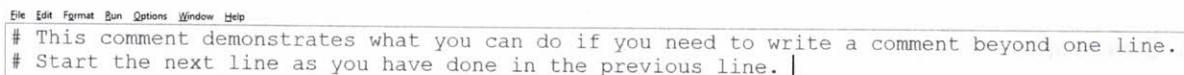
Comments that start are on the same line as the code are called **inline comments** (see Fig 2).



```
File Edit Format Run Options Window Help
print("Inline commenting.") # This is an inline comment.
```

Fig 2. Inline Commenting

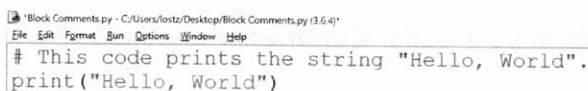
In general, keep comments as short as possible. However, sometimes you may need to write more than reasonably fits on a single line. In that case, you can continue your comment on a new line that also begins with the # symbol (see Fig 3):



```
File Edit Format Run Options Window Help
# This comment demonstrates what you can do if you need to write a comment beyond one line.
# Start the next line as you have done in the previous line. |
```

Fig 3. Commenting Beyond One Line

It is important to comment on only what is necessary. Avoid comments that describe what is obvious just by reading the code (see Fig 4):



```
Block Comments.py - C:/Users/lost/Desktop/Block Comments.py (3.6.4)
File Edit Format Run Options Window Help
# This code prints the string "Hello, World".
print("Hello, World")
```

Fig 4: Redundant Comments on the Obvious

The following are recommendations for writing comments based on the PEP 8:

- Comments should always be written in complete sentences.
- A single space should exist between the # and the first word of the comment
- For inline commenting, the # should be at least 2 spaces away from the last character of the code in that line.

§3.2 Commenting Out

You can also use comments to comment out code while you are testing or debugging your code.

By putting # at the beginning of a line of code, you can run your program as if that line of code did not exist, without having to actually delete the line.

IDLE (File Editor)

- To comment out a section of the code, highlight that particular section of the code and use the keys "Alt" and "3" simultaneously.
- To de-comment the section, use the keys "Alt" and "4" simultaneously.

Jupyter Notebook

- To comment out a section of the code, highlight that particular section of the code and use the keys "Ctrl" and "/" simultaneously.
- To de-comment the section, use also the keys "Ctrl" and "/".