

# Loops

Introduction to Business Programming

Instructor: CH Huang



# Schedule



2/20	Data and Basic Operation
2/27	Day off
3/6	Control Structure
3/13	Loop
3/20	Functions, and File Handling
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4/24	<b>Midterm Exam</b>

Scope of Quiz 1

Scope of Midterm Exam

# Key Concepts

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## Scope of the Guidelines

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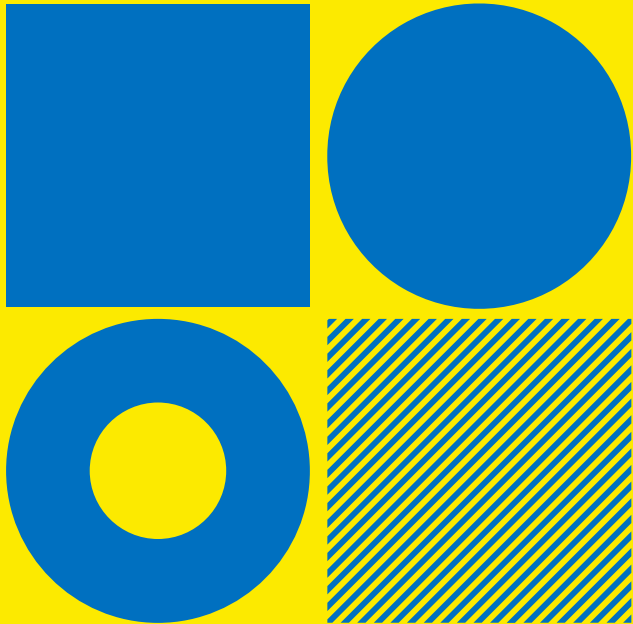
### 1. Loops

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*How to use loop to execute the same code multiple times*

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## 1. Loops



How to use loops to execute the same code multiple times.



# Loops in python

Python provides different types of loops to deal with **repeating routines**. While all the ways provide **similar basic functionality**, they differ in their **syntax and condition-checking time**.

# Repeating routines



Taiwan high speed rail  
Tainan station  
Hey, I'm here!



Hey, I'm here!



Hey, I'm here!



NCKU  
Hey, I'm here!



# While Loop in Python

The while loop executes a block of statements repeatedly **until** a given condition is satisfied (condition is false).

And when the condition becomes false, the line immediately after the loop in the program is executed.



# Basic While Loop Structure

```
i = 0
while (i < 10):
    i = i + 1
    print(i)
```

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

```
i = 0
while (i < 10):
    i = i + 1
    print(i, end=" ")
```

1 2 3 4 5 6 7 8 9 10





# A never ending infinite loop

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```
count = 0
while (count == 0):
    print("Hello NCKU")
```

**A never-ending infinite loop** where the condition is always true that we have to **forcefully terminate the compiler**.



**Thanks**  
for listening.