

Web Application Development using Python

Introduction to Python

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Outline

- Your first Python program
- Numbers and Math
- Storing data in variables
- Text and Strings



Your first Python program

```
print("Hello HTU!")  
print("Welcome to Python Web.")
```

```
$ python ./hello.py
```

Numbers and Math

ex3.py

- Basic arithmetic
 - $+$ $-$ $/$ $*$ $\%$
- Logical comparator
 - $<$ $>$ $<=$ $>=$ $!=$ $==$
- Additional operators
 - $**$
 - $//$



Storing data in variables

ex4.py / ex5.py / ex6.py / ex7.py

- What is a **variable**?
 - A variable is nothing more than a name for something.
- Variables in Python are dynamically typed.
- `user_name = "George"`
- `user_age = "50"`



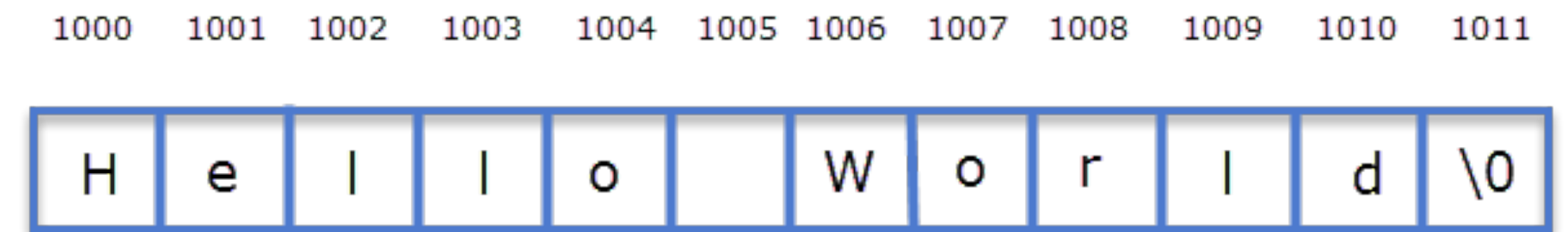
Text and Strings

ex8.py / ex9.py / ex10.py / ex11.py

- Strings are used as the data type for text.
- We can create them simply by enclosing characters in quotes.
- Python treats single quotes the same as double quotes.

- `hello = 'Hello World!'`

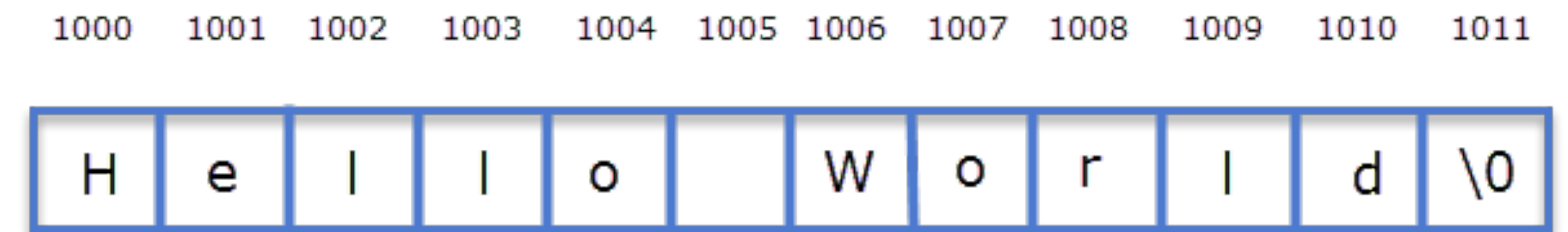
- `class_msg = "Welcome to Python web (ICTC5)."`



String operations

`ex8.py` / `ex9.py` / `ex10.py` / `ex11.py`

- With Strings we can also use the following operators
 - `+` to concatenate strings
 - `*` to repeat strings
 - `[]` to slice a string
 - `[:]` to range slice a string



String formatting

ex8.py / ex9.py / ex10.py / ex11.py

- `name = Alan Turing`
- `balance = 11001111`
- `print('Hello, %s.' % name)`
- `print('Your current balance is %d.' % balance)`