

COMP110: Variables and Data Types

Variables in Python are used to store data values. You do not need to declare the type of variable explicitly.

1. Integer

```
x = 10
```

```
age = 21
```

2. Float

```
pi = 3.14159
```

```
temperature = 98.6
```

3. String

```
name = "Alice"
```

```
greeting = "Hello, " + name
```

4. Boolean

```
is_student = True
```

```
has_passed = False
```

5. List

```
fruits = ["apple", "banana", "cherry"]
```

```
print(fruits[0]) # Output: apple
```

6. Dictionary

```
person = {"name": "Alice", "age": 21}
```

```
print(person["name"]) # Output: Alice
```

7. NoneType

```
value = None
```

Python is dynamically typed, so the type is inferred based on the value assigned.