IS1110 Tutorial 2 – Exercises

This tutorial builds on last week. You will practise variables, types, operators, user input, and real-world problems.

0) SETUP

Create a folder Tutorial_2 and a Python file tutorial2.py. Save your code for each exercise there.

1) Warmup – Numbers vs Strings

Predict the output and then run:

```
print(42)
print('42')
print('4' + '2')
print(4 + 2)
print(type('42'))
print(type(42))
```

2) Variables & Assignment

Create variables for your name, your age, and the value of pi (3.14159). Print them all in one sentence, for example:

Hello, my name is Alice, I am 19 years old, and pi is about 3.14159

3) Operators Practice

Before running these, guess the result. Then check:

```
7 // 3
7 % 3
2 ** 5
```

4) Full Name Concatenation

Ask the user for their first name and last name. Print their full name in a sentence, e.g.:

Hello, your full name is Alice Smith.

5) Gross Pay Calculator

Ask the user for hours worked and rate per hour. Multiply and print the result.

6) Celsius to Fahrenheit

Ask for a temperature in Celsius. Convert to Fahrenheit using the formula F = (C × 9/5) + 32. Print the result.

7) Even or Odd?

Ask the user for an integer. Use the modulus operator (%) to check if it is even or odd, and print the result.

8) Challenge – Time Converter

Ask the user for a total number of minutes (integer). Use // and % to compute hours and leftover minutes. Example: 135 minutes → 2 hour(s) and 15 minute(s).