Note: Solution for the exercises will be on GitHub.

Day 1: Core Python Refresher

- Data types: int, float, str, list, tuple, dict, set

- Conditionals (if, elif, else)

- Loops (for, while)

- Functions and scopes

- Basic input/output and string formatting

1. Basic Data Types & Variables

```
# Numbers and strings

x = 10

y = 3.14

name = "Alice"


# Boolean

is_active = True
```

2. Conditional Statements

```
age = 20

if age >= 18:

    print("Adult")

elif age >= 13:

    print("Teen")

else:

    print("Child")
```

3. Loops

Note: Solution for the exercises will be on GitHub.

```python
# For loop

for i in range(5):

    print(i)



# While loop

count = 0

while count < 5:

    print(count)

    count += 1
```

4. Functions

```python
def greet(name):

    return f"Hello, {name}!"



print(greet("Bob"))
```

5. String Formatting

```python
name = "Sam"

age = 25

print(f"My name is {name} and I am {age} years old.")
```

Quick Exercise:

1. Write a function that checks if a number is even or odd.

2. Print all even numbers from 1 to 20.

3. Ask user for their name and age, then print a greeting message.