# Hello Python!

INTRODUCTION TO PYTHON

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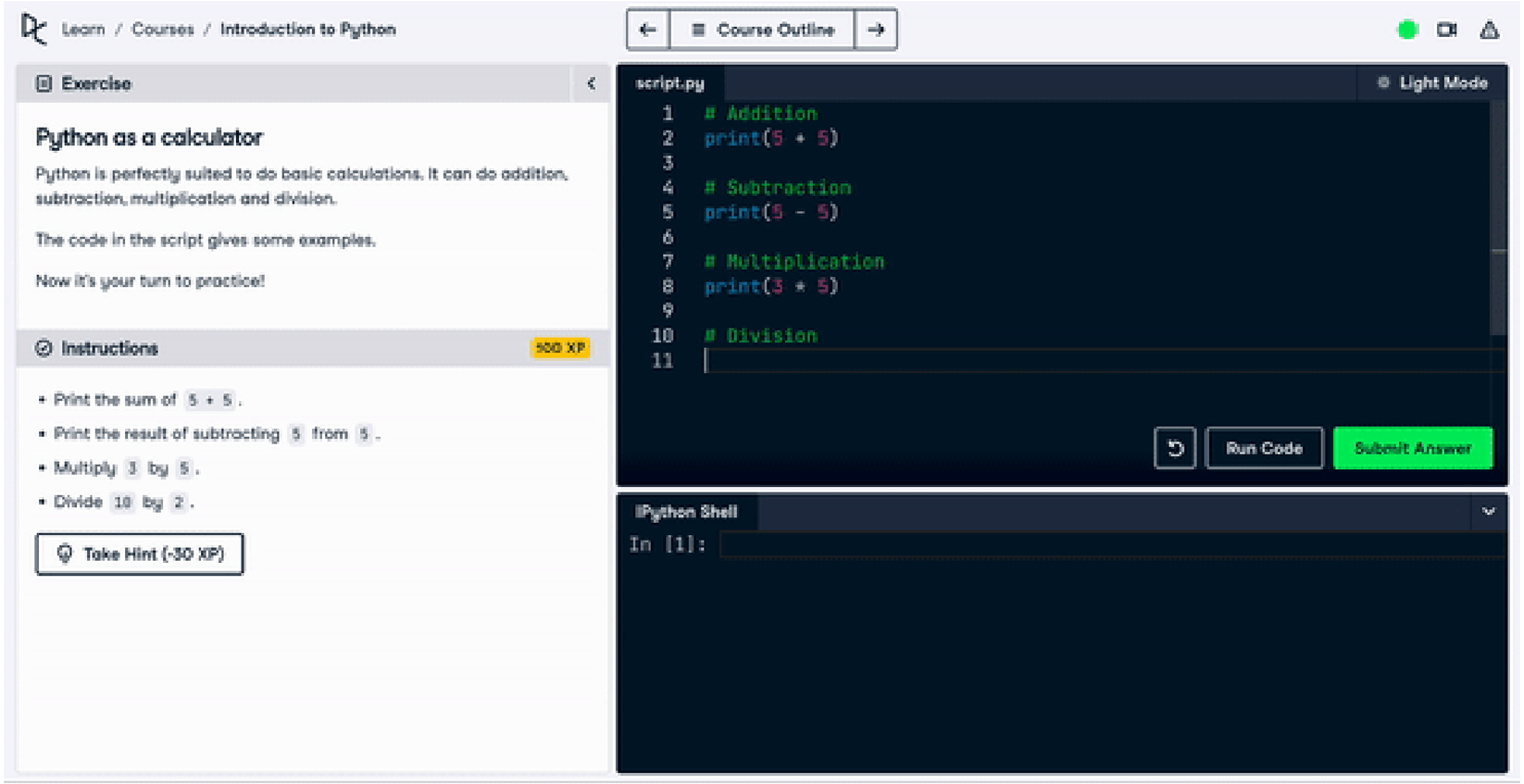
Data Scientist at DataCamp

datacamp

# How you will learn

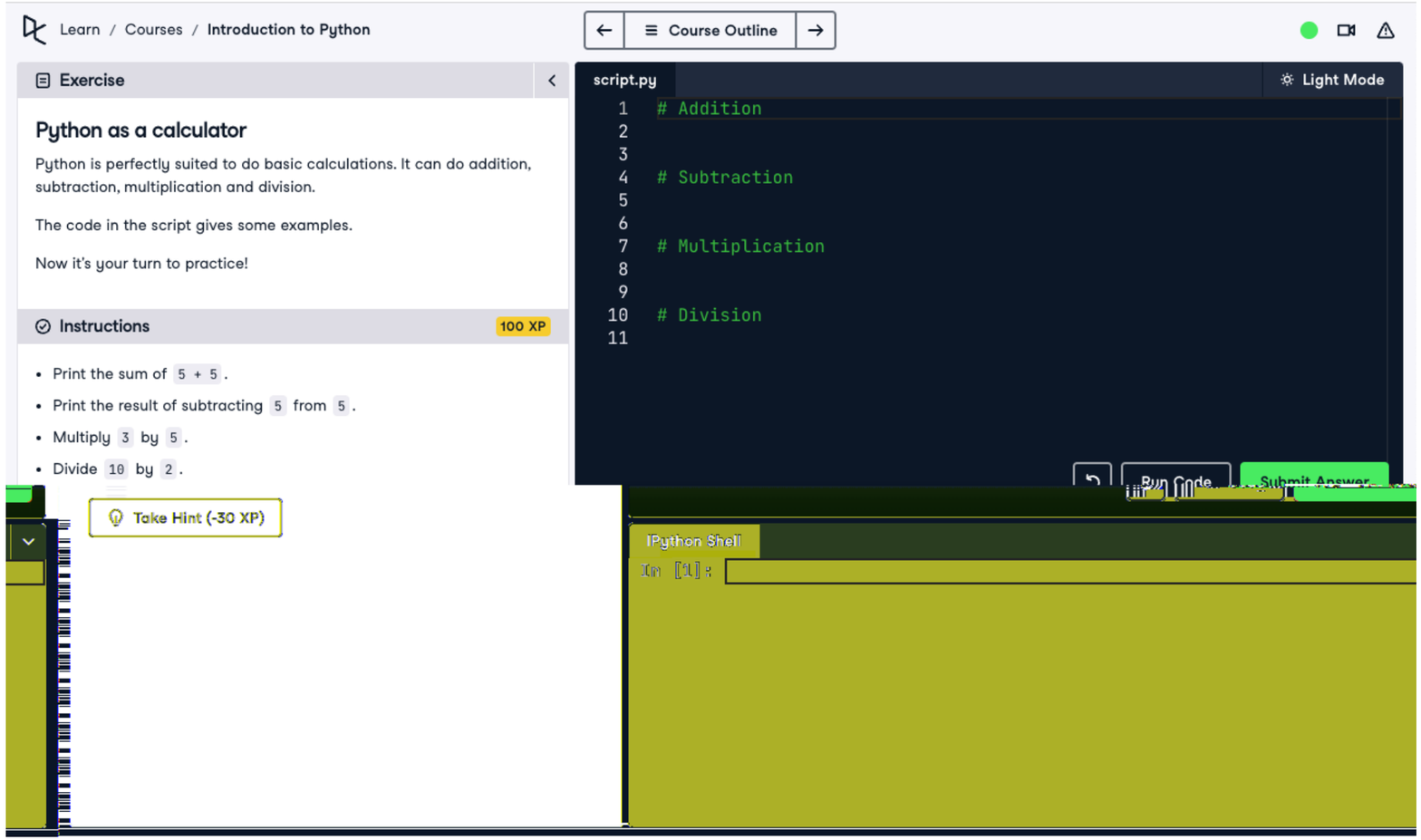


# Python

- General purpose: build anything
- Open source! Free!
- Python packages, also for data science
  - Many applications and fields
- Version 3.x - https://www.python.org/downloads/

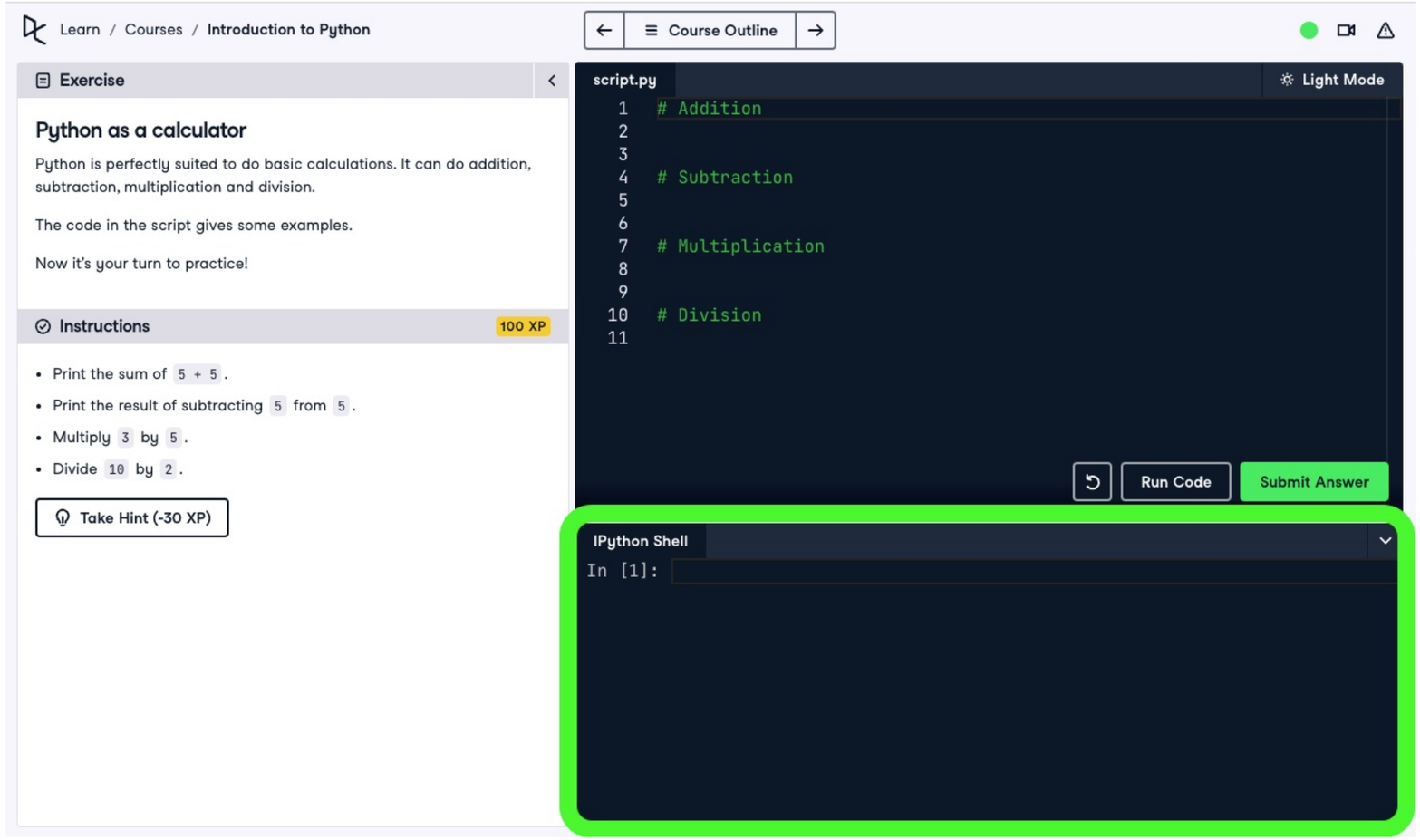
# IPython Shell

## Execute Python commands

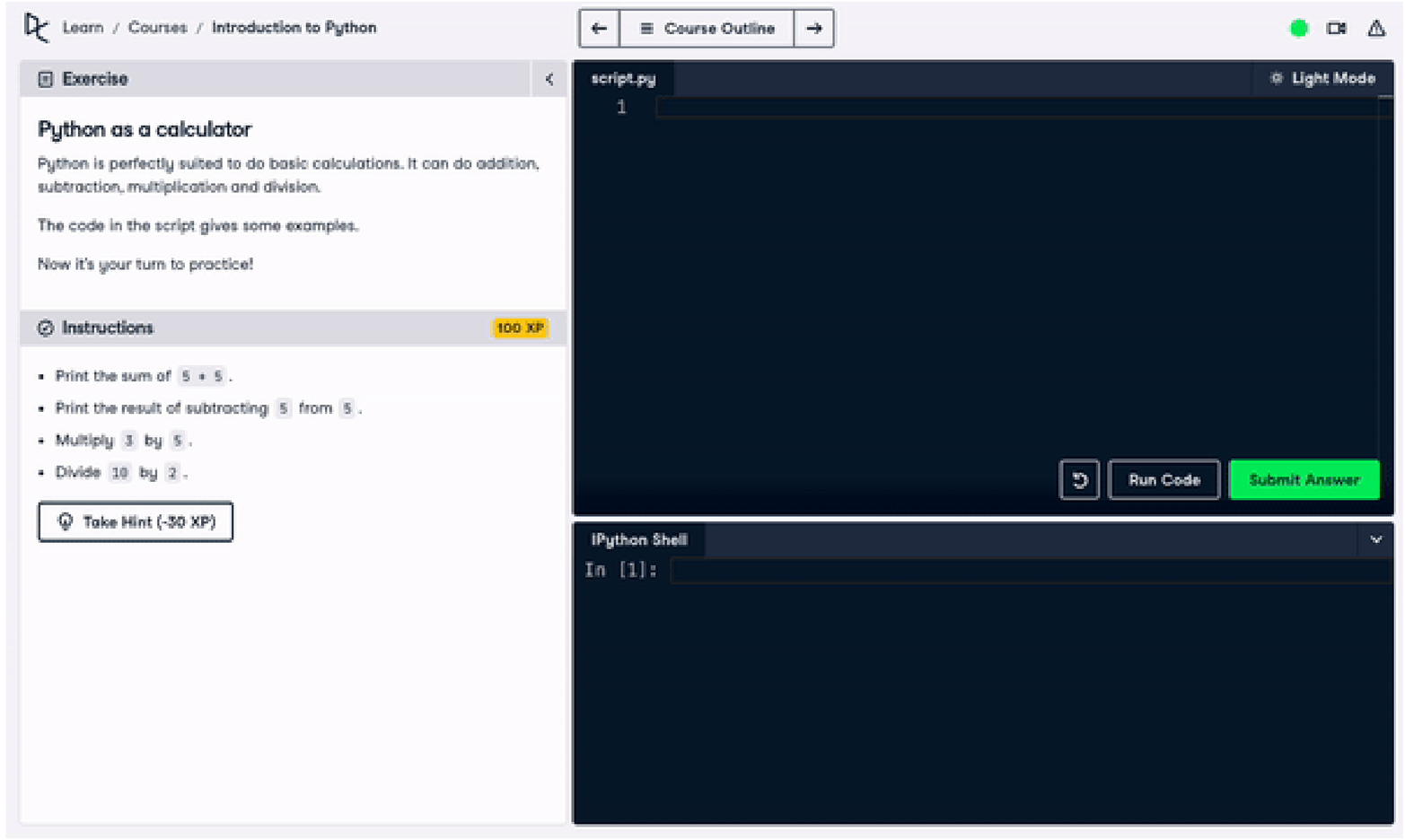


# IPython Shell

## Execute Python commands

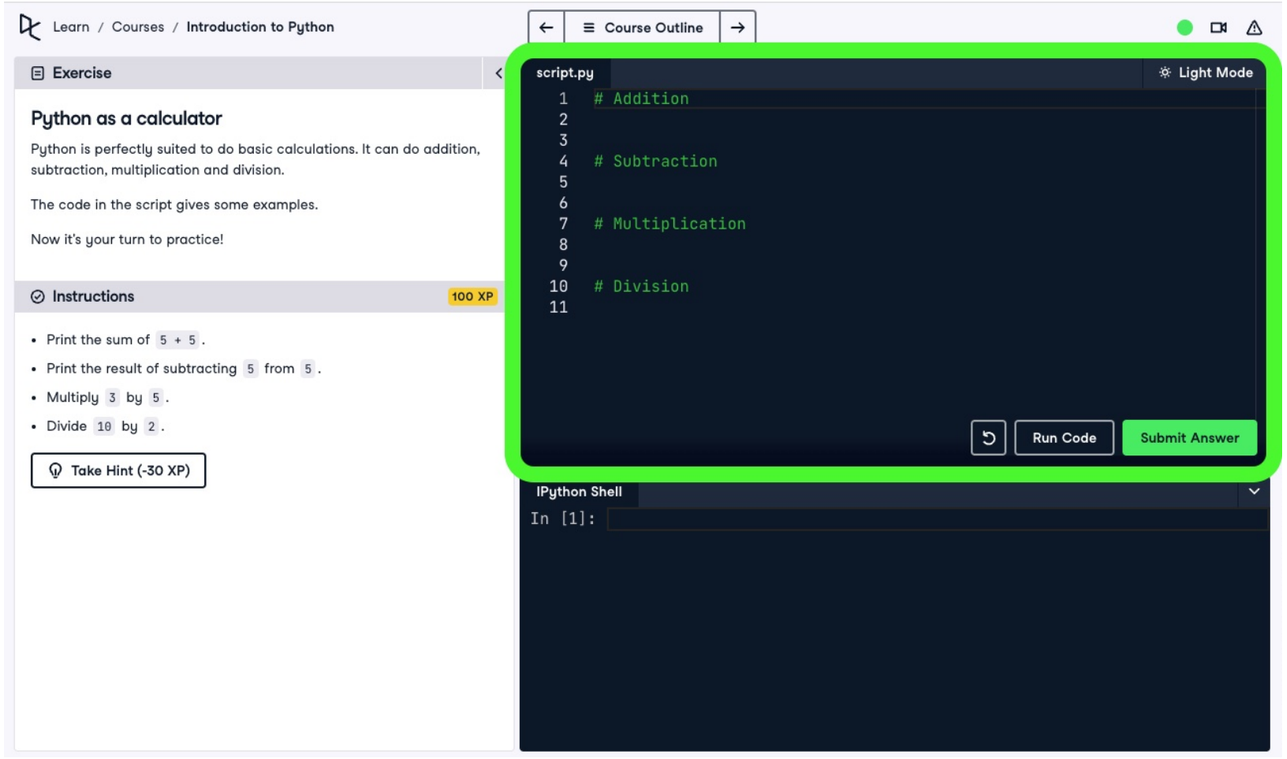


# IPython Shell

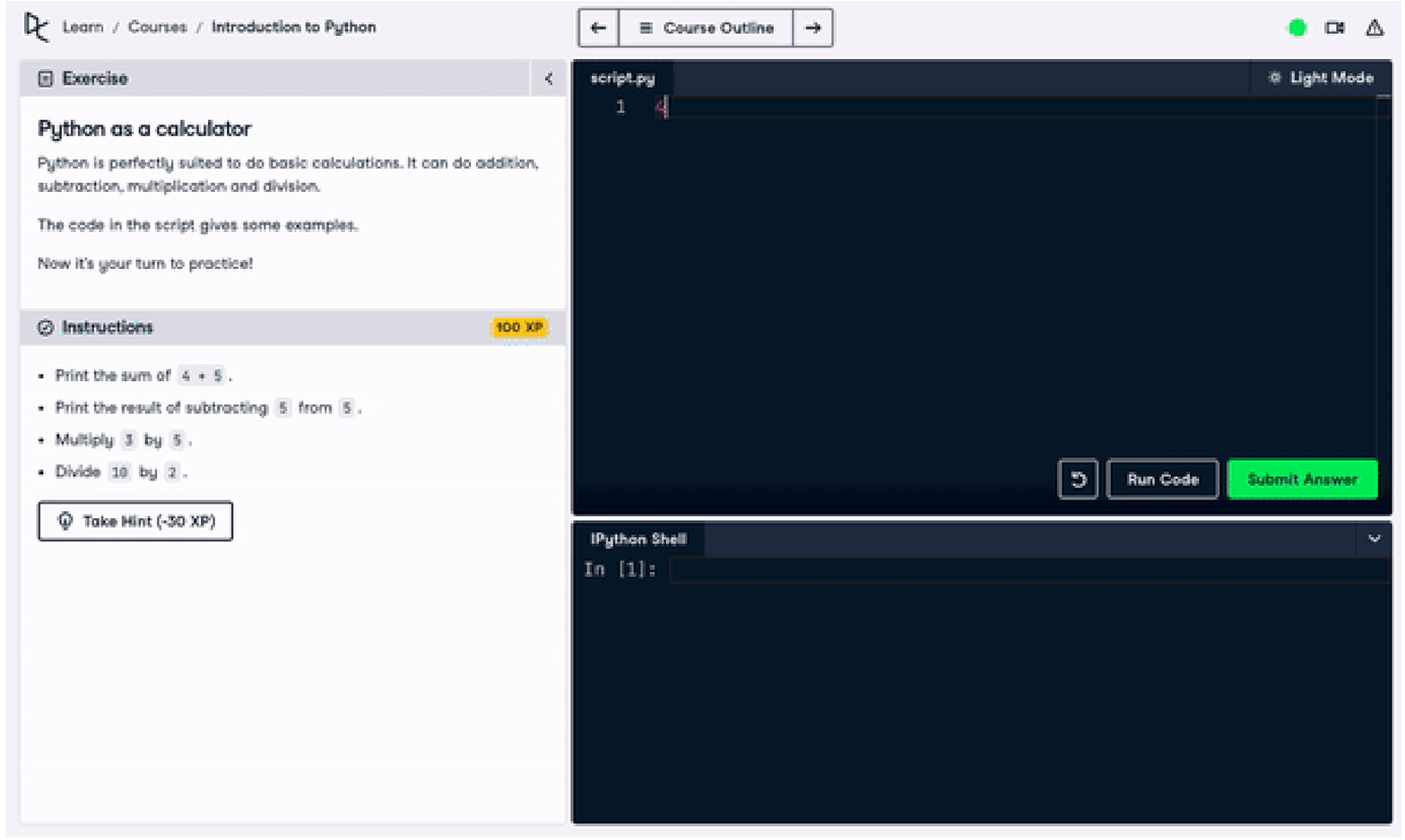


# Python Script

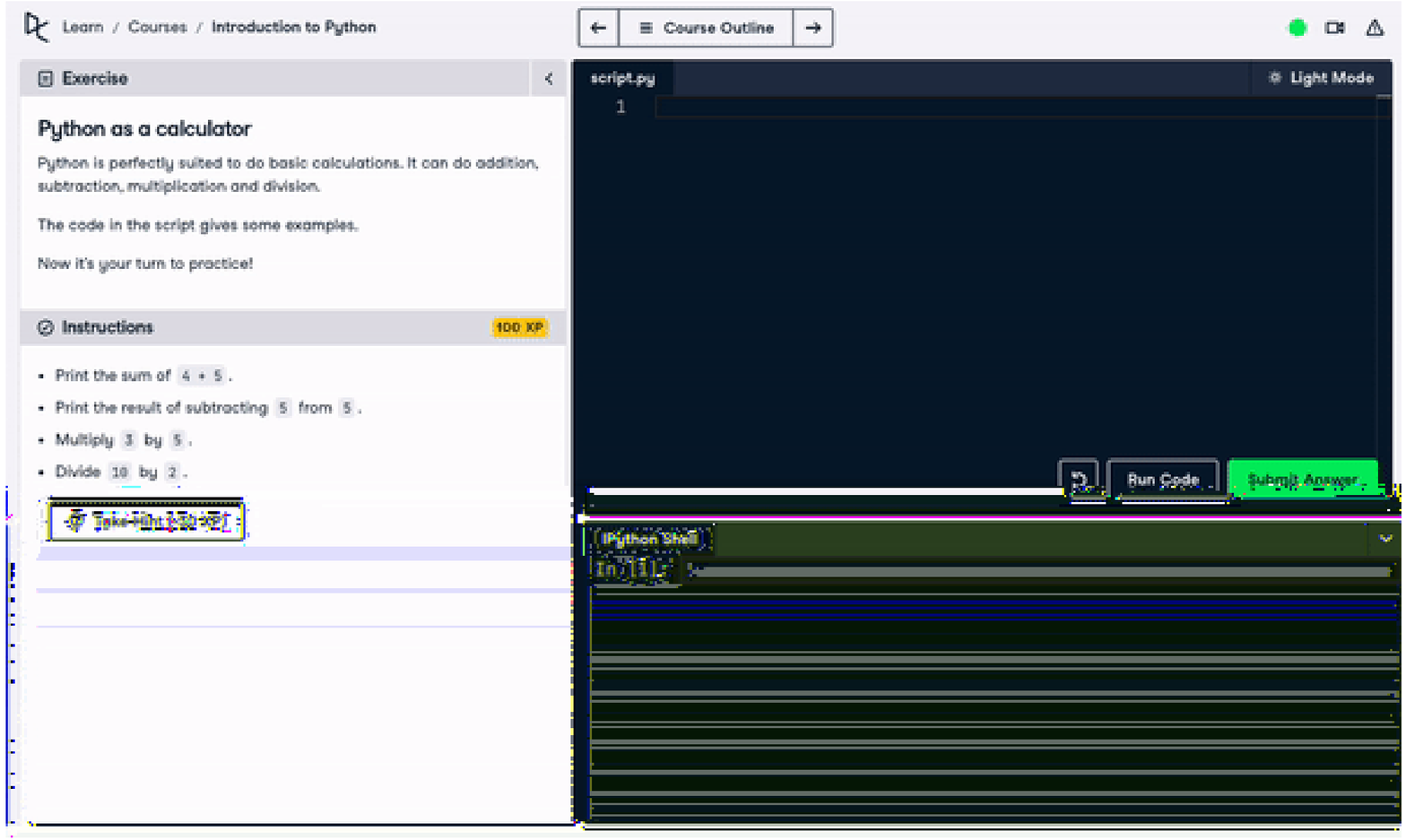
- Text files - `.py`
- List of Python commands
- Similar to typing in IPython Shell



# Python Script

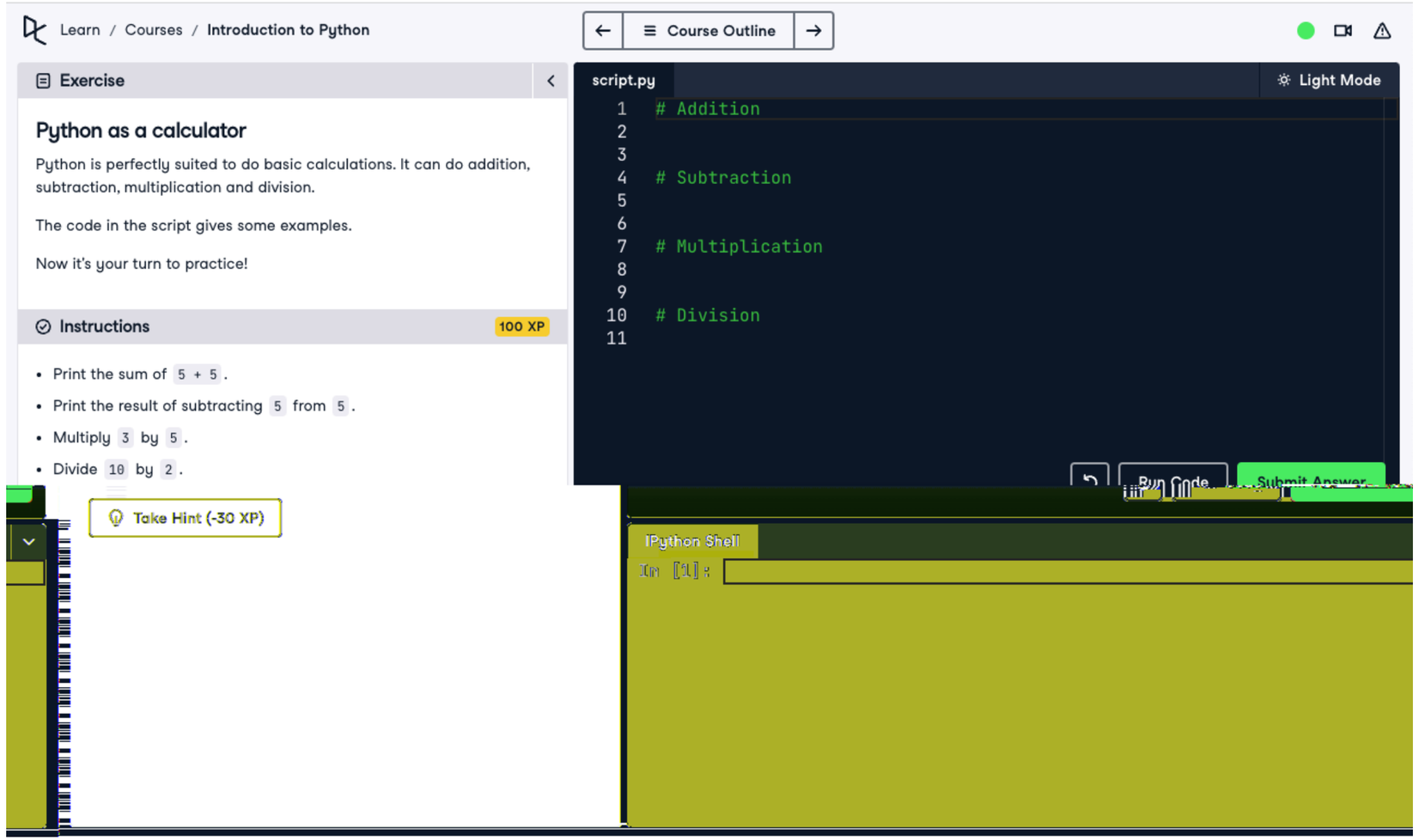


# Python Script




- Use `print()` to generate output from script

# DataCamp Interface



# Let's practice!

INTRODUCTION TO PYTHON

# Variables and Types

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# Variable

- Specific, case-sensitive name
- Call up value through variable name
- 1.79 m - 68.7 kg

```
height = 1.79
weight = 68.7
height
```

```
1.79
```

# Calculate BMI

```
height = 1.79
weight = 68.7
height
```

```
1.79
```

$$\text{BMI} = \frac{\text{weight}}{\text{height}^2}$$

```
68.7 / 1.79 ** 2
```

```
21.4413
```

```
weight / height ** 2
```

```
21.4413
```

```
bmi = weight / height ** 2
bmi
```

```
21.4413
```

# Reproducibility

```
height = 1.79
weight = 68.7
bmi = weight / height ** 2
print(bmi)
```

```
21.4413
```

# Reproducibility

```
height = 1.79
weight = 74.2 # <-
bmi = weight / height ** 2
print(bmi)
```

```
23.1578
```

# Python Types

```
type(bmi)
```

```
float
```

```
day_of_week = 5
type(day_of_week)
```

```
int
```

# Python Types (2)

```
x = "body mass index"
y = 'this works too'
type(y)
```

```
str
```

```
z = True
type(z)
```

```
bool
```

# Python Types (3)

```
2 + 3
```

# Let's practice!

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