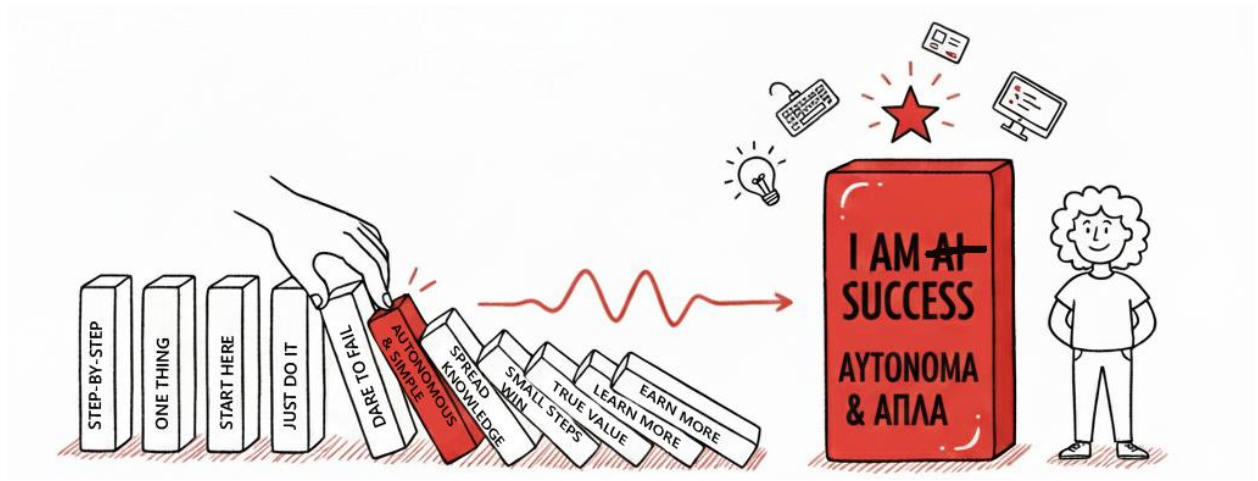




## Student Notes

What's in for you?

What is the time library?  
What does strftime() do?  
What is gmtime()?  
The most common format codes  
Example Code  
Practice Questions (Fill In)  
QUIZ: Python Time Library + QUIZ ANSWERS

Recommended Time: 35 minutes

### 1. What is the time library?

The time library in Python lets us work with:

- dates
- times
- clocks

We can tell Python *how* to display a date using a formatting function called **strftime()**.

### 2. What does strftime() do?

strftime() **formats a time** into a readable string.

*Example:*

## Using Python's time Library – Student Notes

```
strftime("%d/%m/%Y", gmtime())
```

This prints the date in:

- ✓ **DD** → day
- ✓ **MM** → month
- ✓ **YYYY** → year

### 3. What is gmtime()?

**gmtime()** gives the current time in UTC.

We give this to strftime() so it knows *what* to format.

### 4. The most common format codes

| Code | Meaning         | Example |
|------|-----------------|---------|
| %d   | Day (01–31)     | 07      |
| %m   | Month (01–12)   | 04      |
| %Y   | Year (4 digits) | 2025    |
| %H   | Hours (00–23)   | 14      |
| %M   | Minutes (00–59) | 32      |
| %S   | Seconds (00–59) | 09      |

### 5. Example Code

```
from time import strftime, gmtime
```

```
print(strftime("%d/%m/%Y", gmtime()))
```

*Output example:*

11/12/2025

### 6. Practice Questions (Fill In)

#### A. Fill in the blanks

- The function used to format time is called \_\_\_\_\_.
- To get the current UTC time we use \_\_\_\_\_.
- The format code %m represents the \_\_\_\_\_.
- The output of %d/%m/%Y is written as **Day/Month/**\_\_\_\_\_.

#### B. Write the Python code

## Using Python's time Library – Student Notes

Write the code to print today's date in:

1. MM-DD-YYYY format
2. YYYY/MM/DD format

(Hint: use `strftime()` and `gmtime()`.)

### C. True or False

1. `strftime()` prints dates automatically without formatting.
2. `%Y` prints the year in four digits.
3. `gmtime()` gives local time.
4. `%H:%M:%S` prints the time in hours, minutes, and seconds.

### QUIZ: Python Time Library

#### Multiple Choice

1. What does `strftime()` do?

- A. Changes the computer's clock
- B. Formats dates and times
- C. Converts temperature
- D. Deletes time data

2. Which code prints the month?

- A. `%d`
- B. `%m`
- C. `%Y`
- D. `%H`

3. What does `gmtime()` return?

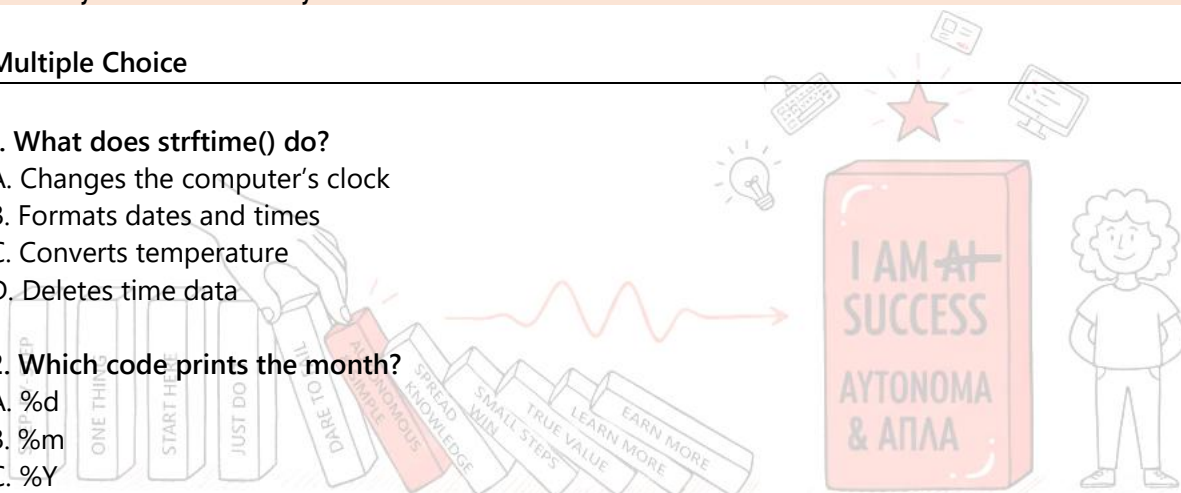
- A. Local time
- B. Unix time
- C. UTC time
- D. A date chosen by the user

4. Which format prints 25/12/2025?

- A. `"%Y/%m/%d"`
- B. `"%d/%m/%Y"`
- C. `"%m/%d/%Y"`
- D. `"%M/%D/%Y"`

5. Which of these prints hours, minutes, and seconds?

- A. `"%H-%M-%S"`
- B. `"%m/%d/%Y"`



## Using Python's time Library – Student Notes

- C. "%d/%m/%Y"
- D. "%Y/%M/%D"

**Short Answers**

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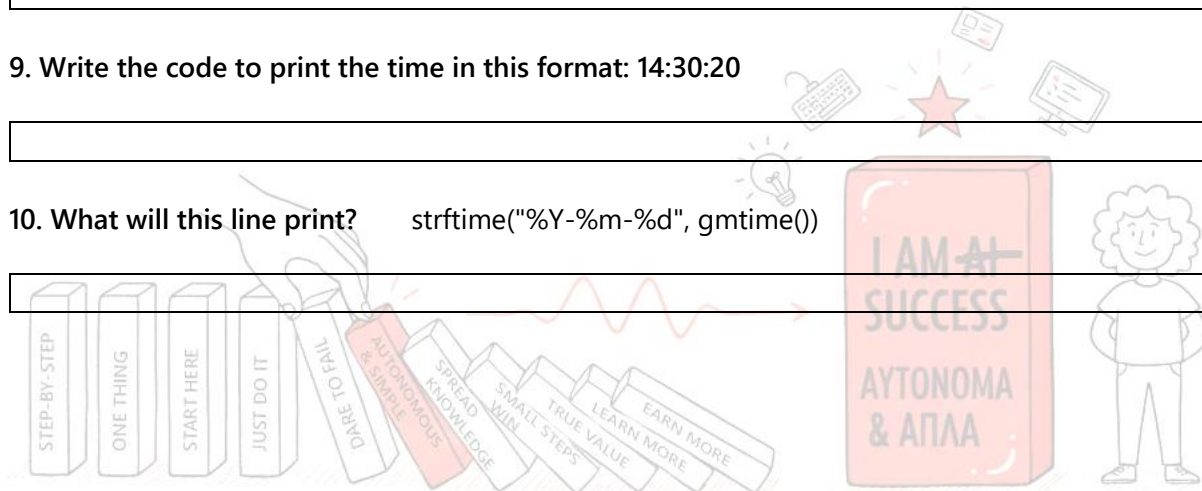
6. Write one code line that prints the current year only.  
(Hint: %Y)

7. What does %d mean in a format string?

8. Why do we use format codes instead of writing the date manually?

9. Write the code to print the time in this format: 14:30:20

10. What will this line print? `strftime("%Y-%m-%d", gmtime())`



## Using Python's time Library – Student Notes

## QUIZ ANSWERS

## A. Fill in the blanks

1. strftime
2. gmtime
3. month
4. Year

## B. Write the Python code

1. **MM-DD-YYYY format**  
`print(strftime("%m-%d-%Y", gmtime()))`
2. **YYYY/MM/DD format**  
`print(strftime("%Y/%m/%d", gmtime()))`

## C. True or False

1. False — strftime() needs a **format string**.
2. True
3. False — gmtime() returns **UTC time**, not local time.
4. True

## Multiple Choice

1. **B** — Formats dates and times
2. **B** — %m
3. **C** — UTC time
4. **B** — Day/Month/Year
5. **A** — Hours, Minutes, Seconds

## Short Answers

## 6. Print the current year only:

```
print(strftime("%Y", gmtime()))
```

## 7. What does %d mean?

It represents the **day of the month** (01–31).

## 8. Why use format codes? Because they let Python automatically generate dates in many styles without typing the date manually. This ensures accuracy and allows formatting changes easily.

## 9. Print time as 14:30:20:

```
print(strftime("%H:%M:%S", gmtime()))
```

## 10. What will this print?

A date in the format: YYYY-MM-DD

Example: 2025-12-11