The Python time Module

You'll learn to...

- Understand core concepts at the heart of working with dates and times,
 such as epochs, time zones, and daylight savings time
- Represent time in code using floats, tuples, and struct_time
- Convert between different time representations
- Suspend thread execution
- Measure code performance using perf_counter()



- ▶ 1. Dealing with Python time in seconds
 - 2. Time zones
 - 3. Python time in data structures
 - 4. String representations
 - 5. Python time for performance measurement



The Epoch

An Epoch is a fixed point in time from which other times can then be represented as "distances" from that time. In Windows/UNIX computing, the epoch is January 1st, 1970, at midnight.

Earlier times are negative

A very simple example





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Python time as a tuple

- 1. Year
- 2. Month as an integer, ranging between 1 (January) and 12 (December)
- 3. Day of the month
- 4. Hour as an integer, ranging between 0 (12 A.M.) and 23 (11 P.M.)
- 5. Minute
- 6. Second
- 7. Day of the week as an integer, ranging between 0 (Monday) and 6 (Sunday)
- 8. Day of the year
- 9. Daylight savings time as an integer with the following values:
 - a. 1 is daylight savings time.
 - b. ø is standard time.
 - c. -1 is unknown.



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Conclusion

You've learned...

- About epochs, time zones, and daylight savings time in Python
- How to represent time in code using floats, tuples, and struct_time
- How to convert between different time representations
- How the sleep function can be used to suspend thread execution
- How to measure code performance using perf_counter()

