CSC108H Worksheet: Object-Oriented Programming – Class Event

For each method, if the example is incomplete, complete it, and then implement the method body.

```
class Event:
    """A new calendar event."""
    def __init__(self, start_time, end_time, event_name):
        """ (Event, int, int, str) -> NoneType
        Precondition: 0 <= start_time < end_time <= 23
        Initialize a new event that starts at start_time, ends at end_time,
        and is named event_name.
        >>> e = Event(12, 13, 'Lunch')
        >>> e.start_time
        >>> e.end_time
        >>> e.name
        'Lunch'
        11 11 11
    def rename(self, new_name):
        """ (Event, str) -> NoneType
        Change the name of this event to new_name.
        >>> e = Event(12, 13, 'Lunch')
        >>>
        >>>
        11 11 11
    def duration(self):
        """ (Event) -> int
        Return the duration of this event.
        >>> e = Event(10, 11, 'Lecture')
        >>> e.duration()
        11 11 11
```

```
def __str__(self):
    """ (Event) -> str
    Return a string representation of this event.
    >>> e = Event(6, 7, 'Run')
    >>> str(e)
    'Run: from 6 to 7'
def __eq__(self, other):
    """ (Event, Event) -> bool
    Return True iff this event has the same start time, end time,
    and name as other.
    >>> e1 = Event(6, 7, 'Run')
    >>>
    >>>
    11 11 11
def overlaps(self, other):
    """ (Event, Event) -> bool
    Return True iff this event overlaps with event other.
    >>> e1 = Event(6, 7, 'Run')
    >>> e2 = Event(0, 7, 'Sleep')
    >>>
    11 11 11
```