

Dates and Times

Methods on Dates and Times

Date/Time Methods

- LocalDate, LocalDateTime
 - plusYears(), plusMonths(), plusWeeks(), plusDays()
 - minusYears(), minusMonths(), minusWeeks(), minusDays()
- LocalTime, LocalDateTime
 - plusDays(), plusMinutes(), plusSeconds(), plusNanos()
 - minusDays(), minusMinutes(), minusSeconds(), minusNanos()
- LocalDate, LocalTime, LocalDateTime
 - isBefore(), isAfter()

```
LocalDate date = LocalDate.of(2022, Month.SEPTEMBER, 15);
```

```
=> 2022-11-15
```

```
date = date.plusDays(4);
```

```
=> 2022-11-19
```

```
date = date.plusWeeks(2);
```

```
=> 2022-12-03
```

```
date = date.plusMonths(3);
```

```
=> 2023-02-03
```

```
date = date.plusYears(1);
```

```
=> 2024-02-03
```

```
// same principle with minus
```

```
LocalDate date = LocalDate.of(2022, Month.NOVEMBER, 15);  
    => 2022-11-15  
  
LocalTime time = LocalTime.of(17, 30);  
    => 17:30  
  
LocalDateTime dateTime = LocalDateTime.of(date, time);  
    => 2022-11-15T17:30  
  
dateTime = dateTime.plusDays(2);  
    => 2022-11-17T17:30  
  
dateTime = dateTime.plusHours(3);  
    => 2022-11-17T20:30  
  
dateTime = dateTime.plusSeconds(15);  
    => 2022-11-17T20:30:15
```

```
// method chaining
```

```
LocalDateTime dateTime = LocalDateTime.of(2022, Month.NOVEMBER, 15, 17, 30);
```

```
dateTime = dateTime.minusDays(5).plusHours(3).minusSeconds(45);
```

```
=> 2022-11-12T23:29:30
```

```
// date and time classes are immutable !!
```

```
LocalDate date = LocalDate.of(1980, 4, 1);
```

```
date.plusDays(20);
```

```
System.out.println(date);
```

```
=> 1980-04-01
```

```
// fix
```

```
date = date.plusDays(20);
```

```
// isBefore() and isAfter()
```

```
LocalDate date1 = LocalDate.of(2022, 11, 3);
```

```
LocalDate date2 = LocalDate.of(2022, 12, 3);
```

```
System.out.println(date1.isBefore(date2));
```

```
=> true
```

```
System.out.println(date1.isAfter(date2));
```

```
=> false
```