|  |  |
| --- | --- |
| LocalDate | Represents a date (year, month, day (yyyy-MM-dd)) |
| LocalTime | Represents a time (hour, minute, second and nanoseconds (HH-mm-ss-ns)) |
| LocalDateTime | Represents both a date and a time (yyyy-MM-dd-HH-mm-ss-ns) |
| DateTimeFormatter | Formatter for displaying and parsing date-time objects |

LocalDate myObj = LocalDate.now(); // Create a date object

System.out.println(myObj); // Display the current date

The output will be:

2024-03-17

----

LocalTime myObj = LocalTime.now();

System.out.println(myObj);

The output will be:

15:24:15.037255

----

LocalDateTime myObj = LocalDateTime.now();

System.out.println(myObj);

The output will be:

2024-03-17T15:24:15.037081

----

**Formatting Date**

**1. using the DateTimeFormatter class**

LocalDateTime myDateObj = LocalDateTime.now();

System.out.println("Before formatting: " + myDateObj);

DateTimeFormatter myFormatObj = DateTimeFormatter.ofPattern("dd-MM-yyyy HH:mm:ss");

String formattedDate = myDateObj.format(myFormatObj);

System.out.println("After formatting: " + formattedDate);

The output will be:

Before Formatting: 2024-03-17T15:24:15.037085  
After Formatting: 17-03-2024 15:24:15

The ofPattern() method accepts all sorts of values, if you want to display the date and time in a different format. For example:

|  |  |  |
| --- | --- | --- |
| **Value** | **Example** | **Tryit** |
| *yyyy-MM-dd* | "1988-09-29" | [Try it »](https://www.w3schools.com/java/tryjava.asp?filename=demo_date_format) |
| *dd/MM/yyyy* | "29/09/1988" | [Try it »](https://www.w3schools.com/java/tryjava.asp?filename=demo_date_formatter1) |
| *dd-MMM-yyyy* | "29-Sep-1988" | [Try it »](https://www.w3schools.com/java/tryjava.asp?filename=demo_date_formatter2) |
| *E, MMM dd yyyy* | "Thu, Sep 29 1988" |  |

**2. using the SimpleDateFormat class**

Date date = **new** Date();

    SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

    String strDate= formatter.format(date);

    System.out.println(strDate);

**Output :**

**new** SimpleDateFormat("MM/dd/yyyy");  output : 04/13/2015

**new** SimpleDateFormat("dd-M-yyyy hh:mm:ss");  output : 13-4-2015 10:59:26

**new** SimpleDateFormat("dd MMMM yyyy");  output : 13 April 2015

**new** SimpleDateFormat("dd MMMM yyyy zzzz");  output : 13 April 2015 India Standard Time

**new** SimpleDateFormat("E, dd MMM yyyy HH:mm:ss z"); output : Mon, 13 Apr 2015 22:59:26 IST

**String to Date**

SimpleDateFormat formatter = **new** SimpleDateFormat("dd/MM/yyyy");

**try** {

        Date date = formatter.parse("31/03/2015");

        System.out.println("Date is: "+date);

     }

**catch** (ParseException e) {e.printStackTrace();}