

## Java Topics Revision

### ← Date and time in Java →

[001]

#### • Java time:

Package for Date and time in java

↳

Java 8 onwards.

Before java 8, java.util package is used to hold the date and time classes. Now, these classes are deprecated.

#### → How java stores a Date?

Date in java is stored in the form of a long number. This long number holds the number of milliseconds passed since 1 January 1970.

↳ To keep the accuracy high we will store the data in milliseconds.

→ Java assumes that 1900 is the start year which means it calculate years passed since 1900 whenever we asked it for years passed.

→ To return the milliseconds in java:

function → `System.currentTimeMillis()`;

- To know the millis → function.
- To Print the Seconds → `function/1000`.
- To Print the Minutes → `function/1000/3600`.
- To Print the days → `function/1000/3600/24`.
- To print the Years → `function/1000/3600/24/365`.

[0002]

→ The date class in Java :-

```
Date d = new Date();  
System.out.println(d);
```

→ To print the current date and time using Date class.

- We can also use constructors provided by the Date class.

→

Java date class has few methods which can be used.

Ex → `getDate()`, `getDay()`



## → Calendar class in Java

- Calendar class is an abstract class.
- We can't create the instance.

→ It gives the instance of class  
 ↳ with its static method.

→ `Calendar c = Calendar.getInstance();`  
`System.out.println(c);`

- There are multiple pre-defined methods in Calendar class.

## → GregorianCalendar Class

- This class is used to create an instance of GregorianCalendar.

→ Print date, time, hours according to GregorianCalendar.

• `System.out.println(c.getTime());`

- Minutes/MINUTES.
- SECONDS
- HOUR.

and many more.

## Time Zone :

Time zone class is used to create Time Zones in java.

Some of the important methods of Time Zone class are :

- `getAvailableIDs()` → Get all the available IDs supported.
- `getDefault()` → get the default Time Zone.
- `getID()` → get the ID of the Time Zone.

[005]

## Java Date and Time API

### Java . time Package

↳ It's an latest package and came from Java 8.

→ Capable of store even nano seconds.

→ Most commonly used classes from Java . time Package :

- `LocalDate` → Represents a Date
- `LocalTime` → Represents a Time.

- Local Date Time  $\rightarrow$  Represents Date + Time.
- Date Time Formatter  $\rightarrow$

Formatter for Displaying  
& parsing date-time  
objects.