**Time Zone Types**

**What is meant by Eastern Standard Time (EST)?**

The **Eastern Standard Time (EST)** when observing **standard time** (autumn/winter) are five hours behind Coordinated Universal Time (UTC-5:00)

**What is meant by Eastern Daylight Time (EDT)?**

When observing **daylight** saving **time** (spring/summer), is four hours behind Coordinated Universal **Time (**UTC-4:00)

**What is meant by Coordinated Universal Time (UTC)?**

**UTC** stands for **Coordinated Universal Time,** a standard used to set all **time** zones around the world. So, for instance, New York City is in the **time** zone **UTC** minus five, **meaning** that it is 5 hours earlier in NYC than the reading on a **UTC** clock (except during U.S. daylight savings, when it is 4 hours earlier).

**Coordinated Universal Time (UTC)** is the basis for civil **time** today. This 24-hour **time** standard is kept using highly precise atomic clocks combined with the Earth’s rotation. The Greenwich Meridian in London, England.

**What is meant by Greenwich Mean Time (GMT)?**

It is the time measured on the Earth’s zero degree line of longitude, or **meridian.** This runs from the North Pole to the South Pole, passing through the Old Royal Observatory in the London suburb of **Greenwich.**

**What is meant by Indian Standard Time (IST)?**

**Indian Standard Time (IST)** is the time zone observed throughout India, with a time offset of UTC+05:30. India does not observe daylight saving time or other seasonal adjustments. In military and aviation time IST is designated E\*(Echo-Star).

**What is meant by Offset?**

A time **offset** is an amount of time subtracted from or added to Coordinated Universal Time (UTC) time to get the current civil time, whether it is standard time or daylight saving time (DST).

**What is meant by UTC Offset?**

The **UTC Offset** is the difference in hours and minutes from **Coordinated Universal Time (UTC)** for a particular place and date. It is generally shown in the format plus and minus [hh]:[mm],+-[hh][mm],+-[hh]. So if the time being described is one hour ahead of UTC (such as the time in Berlin during the winter), the UTC offset would be “+01:00”.

**What is meant by Daylight Saving Time (DST)?**

**Daylight Saving Time,** also called **summer time,** system for uniformly advancing clocks, so as to extend daylight hours during conventional waking time in the summer months.

**What is meant by TimeZoneInfo Object?**

A **TimeZoneInfo object** can represent any time zone, and methods of the **TimeZoneInfo** class can be used to convert the time in one time zone to the corresponding time in any other time zone.

The **TimeZone** class recognizes only the local time zone, and can convert times between Coordinated Universal Time (UTC) and local time.

A **Time Zone** is a geographical region in which the same time is used.

**Methods:**

1. **FindSystemTimeZoneById:**

It Instantiates a time zone based on its identifier.

1. **ConvertTime(DateTime, TimeZoneInfo):**

Converts a time from one time zone to another.

1. **ConvertTime(DateTimeOffset, TimeZoneInfo):**

Converts a time to the time in a particular time zone.

**UTC Vs IST Vs EST:**

**UTC 🡪** Universal Coordinated Time

**IST 🡪** Indian Standard Time

**EST 🡪** Eastern Standard Time

* Coordinated Universal Time (UTC) is 4 hours ahead of Eastern Standard Time(EST)
* Indian Standard Time (IST) is 5 hours 30 minutes ahead of Coordinated Universal Time (UTC)
* Indian Standard Time(IST) is 9 hours and 30 minutes ahead of Eastern Standard Time(EST)