**Calender Conversion**

It may seem that the world world is following the Gregorian calender (the calender which we use). The truth is it is not used by everyone in the world. Few countries follow different calenders. For e.g.; Israel uses Hebrew calender, China uses Chinese calender, Egyptians use Egyptian calender, Ethiopians use Ethiopian calender; and so on.

This code is about conversion of date between Gregorian calender and Julian calender. The Gregorian calender (also called Christian calender) is the calender which we use everyday. The Julian calender is almost similar to the Gregorian calender, except for a slight difference. The Julian calender was used by Europeans in the medieval ages. In the Gregorian calender, the years divisible by 100 but not divisible by 400 (e.g. 2100,1700,1900); are not considered as leap years, although they are divisible by four (4); while in Julian calender these years (2100,1700,1900 etc.) are considered as leap years (just because they are divisible by 4). This makes date in Julian calender lag behind that of the Gregorian calender by few days (in the 21st century of Gregorian calender, the Julian calender lags behind the Gregorian calender by 13 days. This gap between both calenders changes in the other centuries of Gregorian calender). The user has to enter the date and the calender of that date (Gregorian date or Julian date). The equivalent date in calender other than the entered calender is shown as the output. For e.g. if the date we have entered is Gregorian, we get its equivalent date in Julian calender; and vice-versa.

Watch the video for the output of the code.