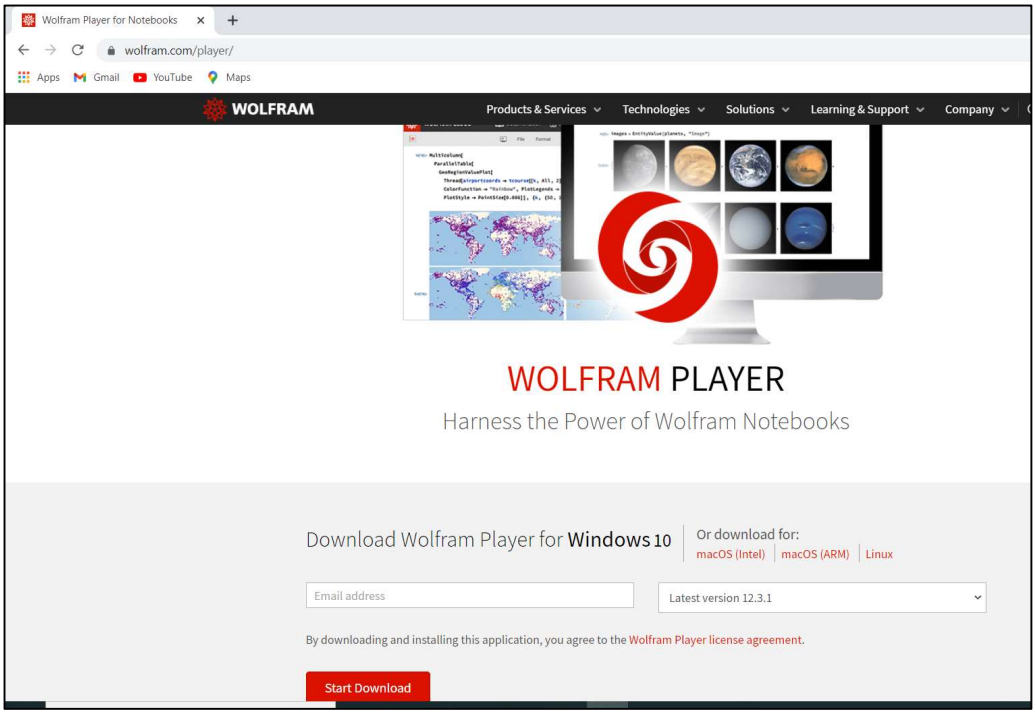
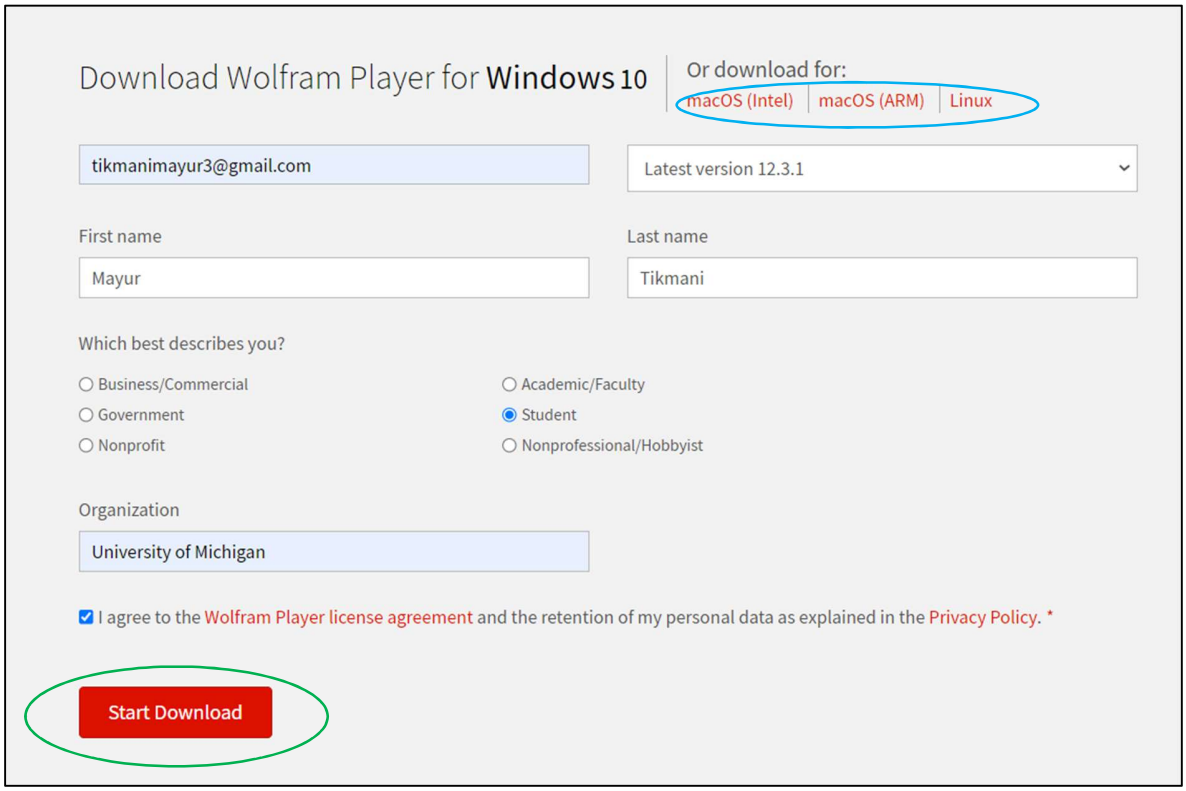
Wolfram CDF installation tutorial

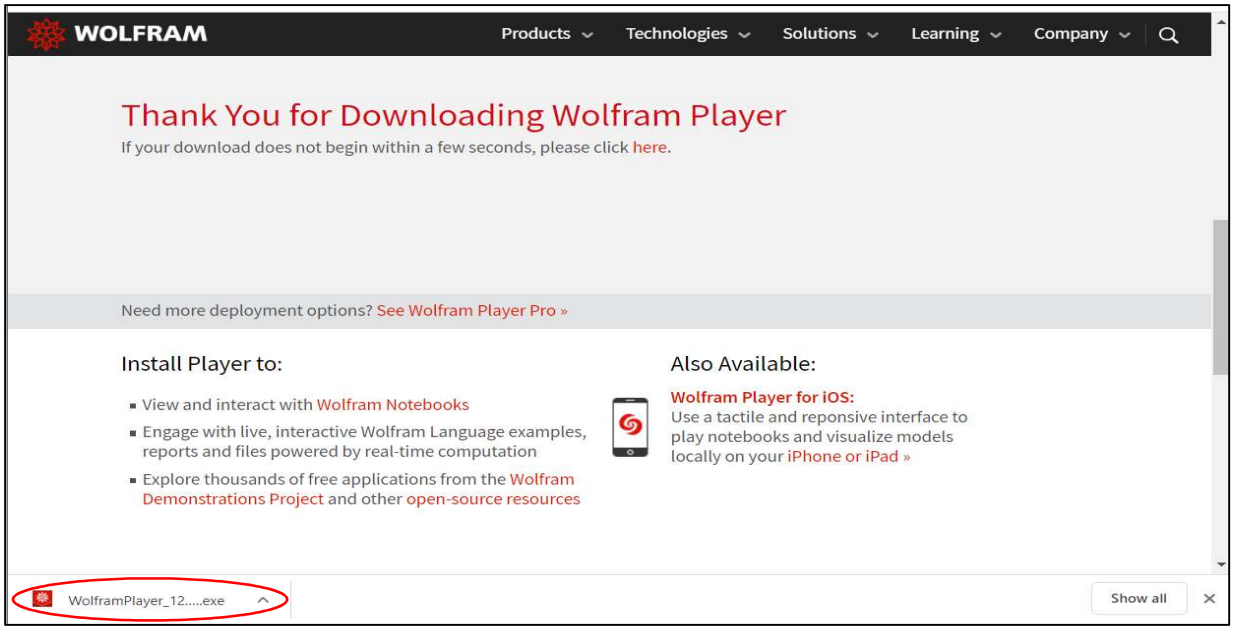
Step 1: Go to the wolfram CDF player official website (https://www.wolfram.com/player/), to download and install Wolfram CDF player. You will see a page like this



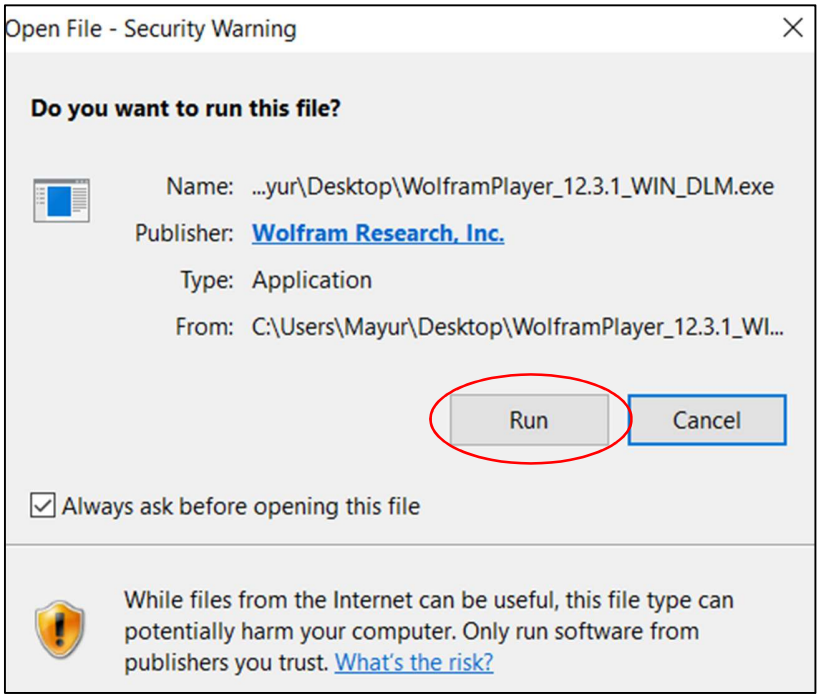
Step 2: By default, the browser will select the Windows platform (10) for you. If you are working on a different platform (Mac/Linux), find Mac/Linux link on upper right corner and select the one you require. Then you need to fill in your details (such as Email, Name etc.) and then select the CDF player version you want to install using drop-down menu. It is recommended to install Latest Version 12.3.1. After that, click Start Download. It might take a few minutes to download.



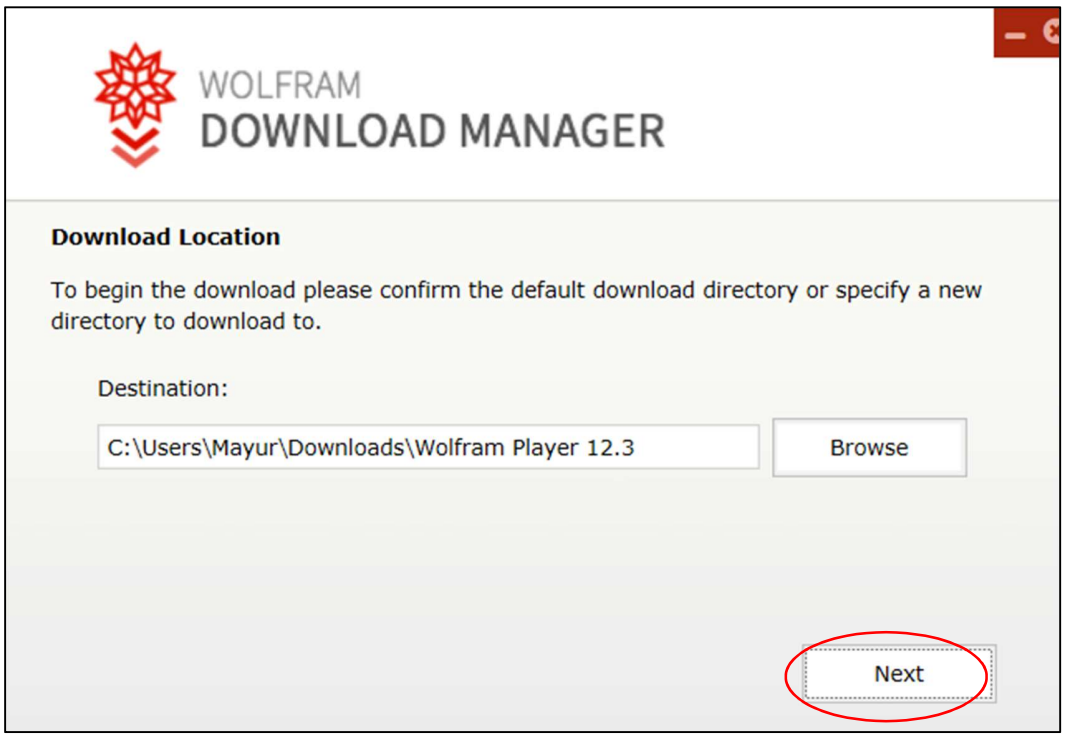
Step 3: You will find that following page appears and your file is downloaded at the bottom of the browser (if you are using Google Chrome) as shown below



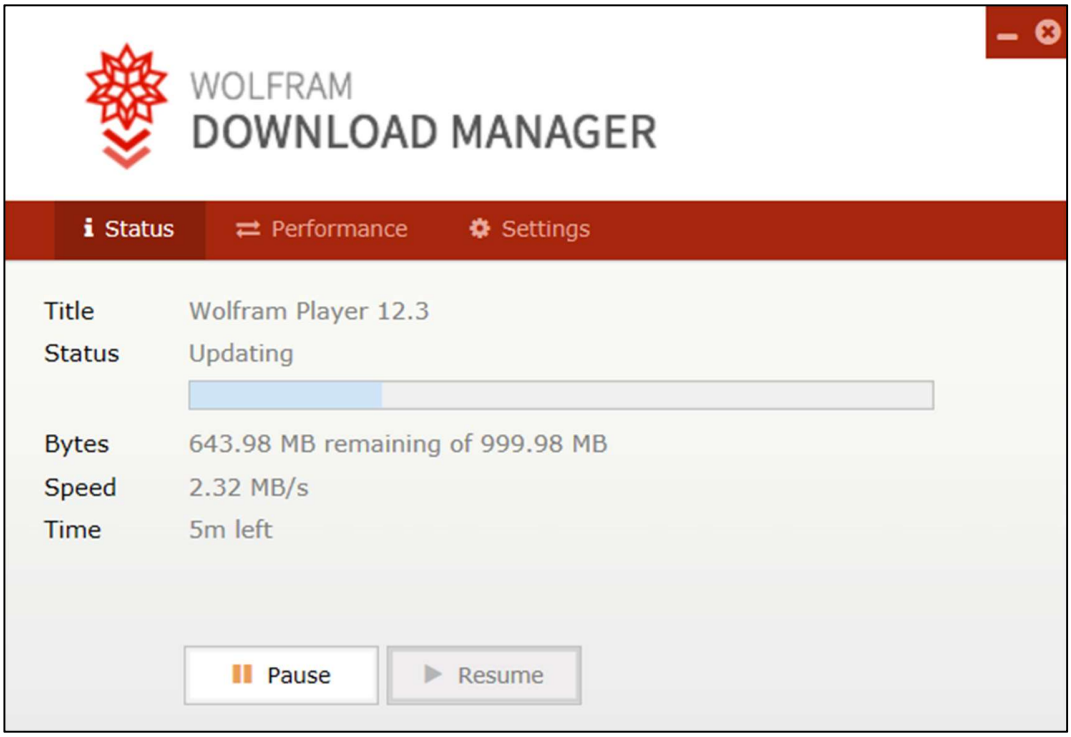
Step 4: After downloading the installation file, double click on it and you should see another window asking your permission. Click on Run button to allow.



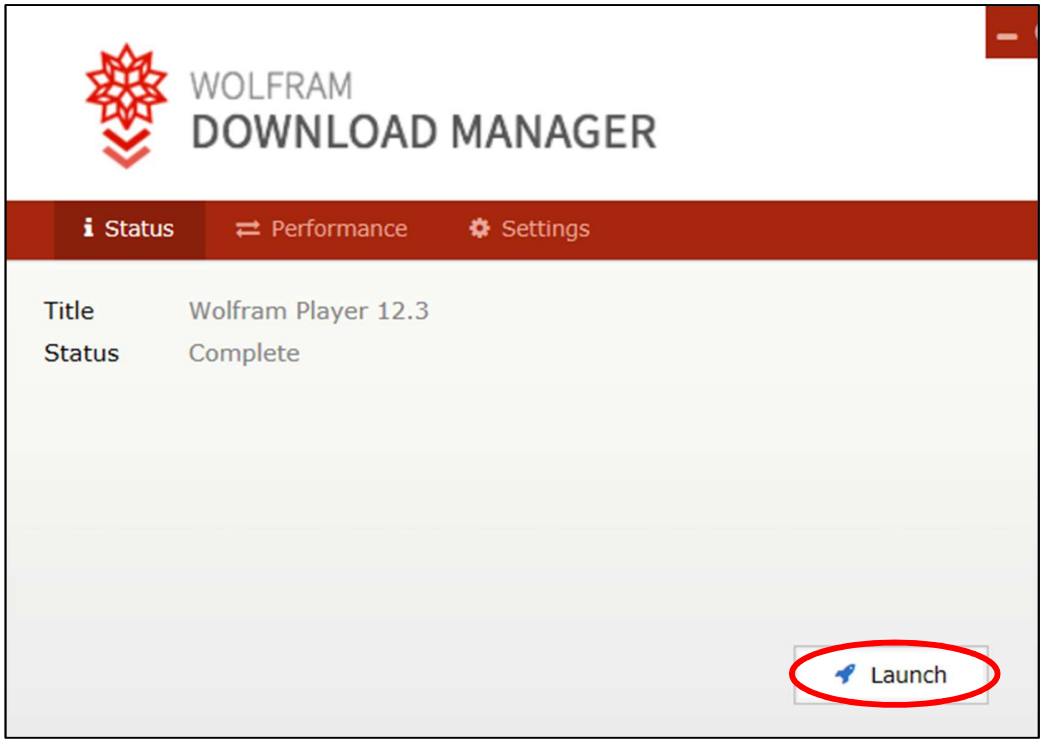
Then Wolfram player asks for Download location. You can click on Next button. If you wish to specify a particular location, you can do so by using Browse feature.



Now your file will start to download. The below window will appear showing the Download Status.



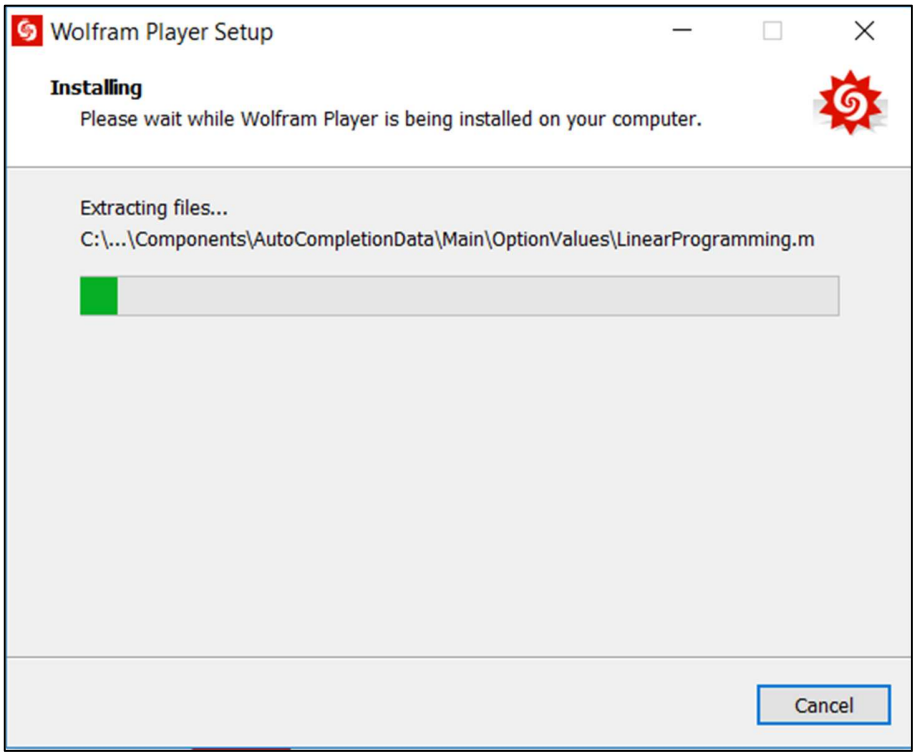
After your file is downloaded, you will see following window. Click on the **Launch** button



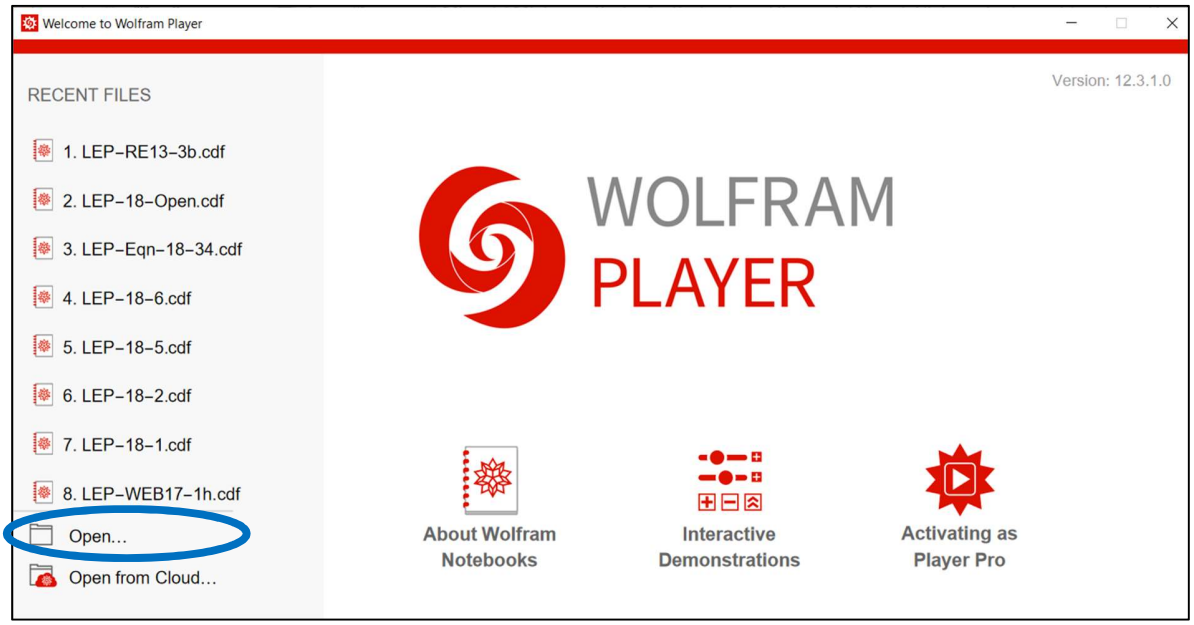
Step 5: After you hit Launch button, a pop-up window will appear asking your permission. Allow for the program to make changes to your computer by clicking on yes button.

You should then see the following window. Now you are ready to Install CDF player. Click **Install** to begin the installation.

After Clicking on Install, you shall see following page showing the progress of installation.



Step 6: After installation is complete, the following window will appear. Click Open in the left panel and select the file you want to run. Alternatively, you can double click on the file you want to run.



Step 7: You can play with CDF code now! If the graph doesn't appear then hit Shift+Enter to execute the code. Use the slider to change the parameters and see the effect of changing parameters on profile.

LEP-12-1a.cdf - Wolfram Player

File Edit Window Help

WOLFRAM Player

Find

In[-]:= (*Example 12-1 Butane Isomerization (Part a)*)

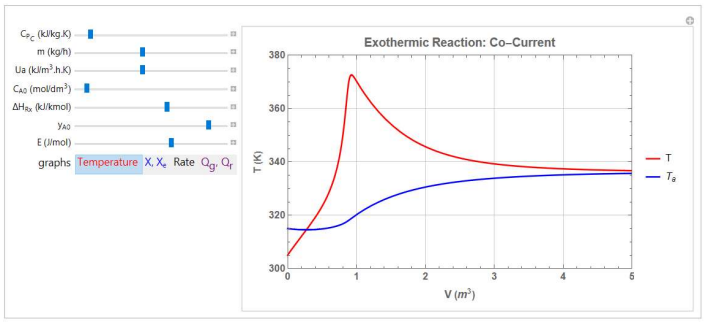
Differential equations

```
1 d(Ta)/d(V) = Ua*(T-Ta)/m/Cpc
2 d(X)/d(V) = -ra/Fa0
3 d(T)/d(V) = (Qg-Qr)/(Cpo*Fa0)
```

Explicit equations

```
1  Cpc = 28
2  m = 500
3  Ua = 5000
4  deltaH = -34500
5  Qr = Ua*(T-Ta)
6  Ca0 = 1.86
7  FTo = 163
8  yao = 0.9
9  A = 1.073*10^11
10 E = 65700
11 Fa0 = yao*FTo*.1
12 Kc = 3.03*exp((deltaH/8.314)*((T-333)/(T*333)))
13 k = A*exp(-E/(8.31*T))
14 ra = -k*Ca0*(1-(1+1/Kc)*X)
15 Xe = Kc/(1+Kc)
16 Qg = ra*deltaH
17 Cpo = 159
18 rate = -ra
```

Out[-]=



Note: While we used the expression k=k1*exp(E/R*(1/T1-1/T2)) in the textbook, in wolfram we have to use k=A*exp(-E/RT) in order to explore all the variables