

✓ Getting started

The document you are reading is not a static web page, but an interactive environment called a **Colab notebook** that lets you write and execute code.

For example, here is a **code cell** with a short Python script that computes a value, stores it in a variable, and prints the result:

```
#To Calculate the length of transition curve
V= int(input("Enter the value of design speed: "))
R= int(input("Enter the value of Radius of curvature: "))
N= int(input("Enter the value of slope: "))
W= float(input("Enter the value of width of road including extra widening: "))
emax=float(input("'enter the value for plain terrain:"))
ecal= (V*V/(225*R))
print("The value of Super elevation:",ecal)
if ecal<emax:
    print(ecal)
else:
    print(emax)
    Ls=(emax*N*W/2)
    print("The length of transition curve:", Ls)
```

```
↵ Enter the value of design speed: 65
Enter the value of Radius of curvature: 220
Enter the value of slope: 150
Enter the value of width of road including extra widening: 7.5
'enter the value for plain terrain:0.07
The value of Super elevation: 0.08535353535353535
0.07
The length of transition curve: 39.37500000000001
```

```
seconds_in_a_day = 24 * 60 * 60
seconds_in_a_day
```

```
↵ 86400
```

To execute the code in the above cell, select it with a click and then either press the play button to the left of the code, or use the keyboard shortcut "Command/Ctrl+Enter". To edit the code, just click the cell and start editing.

Variables that you define in one cell can later be used in other cells:

```
seconds_in_a_week = 7 * seconds_in_a_day
seconds_in_a_week
```

```
↵ 604800
```

Colab notebooks allow you to combine **executable code** and **rich text** in a single document, along with **images**, **HTML**, **LaTeX** and more. When you create your own Colab notebooks, they are stored in your Google Drive account. You can easily share your Colab notebooks with co-workers or friends, allowing them to comment on your notebooks or even edit them. To learn more, see [Overview of Colab](#). To create a new Colab notebook you can use the File menu above, or use the following link: [create a new Colab notebook](#).

Colab notebooks are Jupyter notebooks that are hosted by Colab. To learn more about the Jupyter project, see [jupyter.org](#).

✓ Data science