

Team ID	PNT2022TMID17220
Project Name	<u>Signs with Smart Connectivity for Better Road Safety</u>
Sprint	02

Python Code 01:

```
import weather
```

```
from datetime import datetime as dt
```

```
from publishData import logData2Cloud as log2cloud
```

```
# IMPORT SECTION ENDS
```

```
# -----
```

```
# UTILITY LOGIC SECTION STARTS
```

```
def processConditions(myLocation,APIKEY,localityInfo):
```

```
    weatherData = weather.get(myLocation,APIKEY)
```

```
    log2cloud(myLocation,weatherData["temperature"],weatherData["visibility"])
```

```
    finalSpeed = localityInfo["usualSpeedLimit"] if "rain" not in weatherData else
localityInfo["usualSpeedLimit"]/2
```

```
    finalSpeed = finalSpeed if weatherData["visibility"]>35 else finalSpeed/2
```

```
    if(localityInfo["hospitalsNearby"]):
```

```
        # hospital zone
```

```
        doNotHonk = True
```

```
    else:
```

```
        if(localityInfo["schools"]["schoolZone"]==False):
```

```
            # neither school nor hospital zone
```

```
            doNotHonk = False
```

```
    else:
```

```
# school zone

now = [dt.now().hour,dt.now().minute]

activeTime = [list(map(int,_.split(":"))) for _ in localityInfo["schools"]["activeTime"]]

doNotHonk = activeTime[0][0]<=now[0]<=activeTime[1][0] and
activeTime[0][1]<=now[1]<=activeTime[1][1]


return({
    "speed" : finalSpeed,
    "doNotHonk" : doNotHonk
})
```