Sudo\_Code\_for\_Travel\_Time\_Calculator\_

Main Process:

1. Start
2. Declare Wind\_time = 0, People\_time = 0, People\_unit\_time = 0, unit = 1,unit\_time = 10min, Total\_Time = 0, distance = 0, hours = 0, minutes= 0 , Average\_minutes\_per\_km

Total\_travle\_distance = 0,

1. Please input the distance for this travel (one direction).

Set distance = user input

1. Are there any passengers on the car?
2. Yes

Go to sub Process people\_time

1. No

Set People\_unit\_time = Unit\_time \*0.1 driver #5

1. Are there any wind?
2. Yes

Go to sub Process wind\_time

1. No #6
2. Do you have other directions travel?
3. Yes #3
4. No #7
5. Unit = distance/2
6. Total\_travle\_distance = Total\_travle\_distance + distance
7. People\_time = People\_time + People\_unit\_time \* unit
8. Wind\_time = Wind\_time + Wind\_unit\_time \* unit
9. Total\_Time = Total\_Time + unit \* 10min + People\_time + Wind\_time
10. Minutes = Minutes + Total\_time%60
11. Hours = Hours + ( Total\_Time – Minutes ) /60
12. Average\_minutes\_per\_km = Total\_travle\_distance / Total\_Time
13. Display Total\_travle\_distance, Total\_Time（Hours and minutes）, Average\_minutes\_per\_km to user
14. End

Sub process People\_time:

1. Start
2. Declare num\_people
3. How many passage are there in your cars?

Set num\_people = user input

1. People\_unit\_time = Unit\_time\*0.1\*( num\_people +1 driver )
2. End
3. Go back to main process #5

Sub process Wind\_time

1. Start
2. Declare direction\_travel, direction\_wind, force\_levels,wind\_nuit\_time,
3. Which level is the wind?
4. Weak

Set force\_levels = 1 #4

1. Moderate

Set force\_levels = 2 #4

1. Strong

Set force\_levels = 3 #4

1. Which direction do you travel (direction\_travel)?
2. North

Set direction\_travel = 1 #5

1. South

Set direction\_travel = 2 #5

1. West

Set direction\_travel = 11 #5

1. East

Set direction\_travel = 12 #5

1. Which direction the wind is (direction\_wind)?
2. North

Set direction\_wind = 1 #6

1. South

Set direction\_wind = 2 #6

1. West

Set direction\_wind = 11 #6

1. East

Set direction\_wind = 12 #6

1. Check direction\_wind – direction\_travel
2. If = 1 or = -1 #7
3. If = 0 #8
4. If >= 10 or <= -10 #9
5. With the wind

Wind\_unit\_time = - (Unit\_time \* 30% \* force\_levels)

1. Against the wind

Wind\_unit\_time = Unit\_time \* 120%\* force\_levels

1. Perpendicular

Wind\_unit\_time = Unit\_time \* 105%\* force\_levels

1. End
2. Go to main process 6