

Solutions (2) :

```
> IsWeekend=traffic$Day=="Saturday" |  
traffic$Day=="Sunday"  
> GroupNames=c("Weekday", "Weekend")
```

Two Solutions:

1.

```
> boxplot(traffic$AveSpeed[!IsWeekend]  
, traffic$AveSpeed[IsWeekend]  
, names=GroupNames  
, main="Boxplot of Ave Speed Weekday vs Weekend"  
, ylab="Ave Speed")
```

2.

```
> boxplot(traffic$AveSpeed~IsWeekend  
, names=GroupNames  
, main="Boxplot of Ave Speed Weekday vs Weekend"  
, ylab="Ave Speed")
```

Solutions (3):

```
>SpeedSpan=range(traffic$AveSpeed)
```

```
>hist(traffic$AveSpeed[!IsWeekend]
```

```
,xlab=" Ave Speed",ylab=" Density"
```

```
,freq=FALSE,main=" Histogram for Weekday Ave Speed"
```

```
,xlim=SpeedSpan)
```

```
>windows()
```

(if you use a Mac then quartz() instead of windows())

```
>hist(traffic$AveSpeed[IsWeekend]
```

```
,xlab=" Ave Speed",ylab=" Density"
```

```
,freq=FALSE,main=" Histogram for Weekend Ave Speed"
```

```
,xlim=SpeedSpan)
```

Solutions (4 part 1):

```
>HadIncident=traffic$Incidents>= 1
```

(First make an plot that has the correct limits for the x and y axis)

```
>plot(x=traffic$SlowestSpeed , y=traffic$AveSpeed  
,type="n",xlab=" Slowest Speed" ,ylab=" Ave Speed"  
,main=" Scatter Plot btw Ave Speed and Slowest Speed")
```

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Solutions (4 part 2):

(Now add the points for all 4 cases: weekend or not vs incidents or not)

```
>points(x=traffic$SlowestSpeed[IsWeekend & HadIncident]  
,y=traffic$SlowestSpeed[IsWeekend & HadIncident]  
,col="red",pch=16 )
```

```
>points(x=traffic$SlowestSpeed[!IsWeekend & HadIncident]  
,y=traffic$SlowestSpeed[!IsWeekend & HadIncident]  
,col="red",pch=2 )
```

```
>points(x=traffic$SlowestSpeed[IsWeekend & !HadIncident]  
,y=traffic$SlowestSpeed[IsWeekend & !HadIncident]  
,pch=16 )
```

```
>points(x=traffic$SlowestSpeed[!IsWeekend & !HadIncident]  
,y=traffic$SlowestSpeed[!IsWeekend & !HadIncident]  
,pch=2 )
```

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Solutions (4 part 3):

```
> cases=c("Weekend, Incidents>=1", "Weekend, No Incidents",  
"Weekday, Incidents>=1", "Weekday, No Incidents")  
> legend("bottomright",legend=cases, pch=c(16, 16, 8, 8),  
col=c("red", "black", "red", "black") )
```