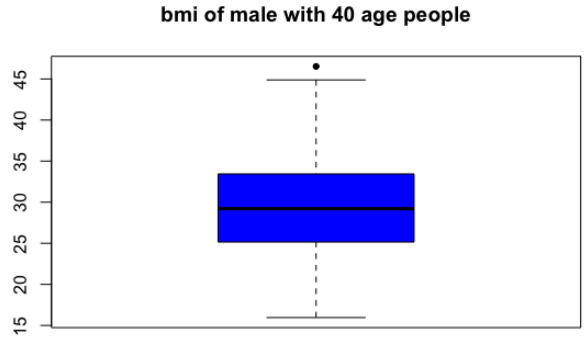
1) U49253220

```
#vivek pakalapati
rm(list=ls())
getwd()
attach(abcd)

under.age=subset(abcd,age<40)
above.bmi=subset(abcd,bmi>=25)

abcd.a1=under.age[sample(1:nrow(under.age),100),]
abcd.a2=above.bmi[sample(1:nrow(higher.bmi),100),]

#Analysis
#1
mean(abcd.a1$bmi)
median(abcd.a1$bmi)
sd(abcd.a1$bmi)
IQR(abcd.a1$bmi)

#@  boxplot

boxplot(abcd.a1$bmi,main="bmi of male with 40 age people", col="blue", pch=20)

#3  25 bmi group

quantile(abcd.a1$charges, probs = seq(0,1,0.1))

#4 Histogram

hist(abcd.a2$charges, cal="yellow", main="above 25 years bmi
value",xlab="charges",ylab="bmi",xlab=((0,10000))


#5    corrplot

c1= cor(abcd.a1[,c(1,3,4,7)])
c2= cor(abcd.a2[,c(1,3,4,7)])

  corrplot(c1)
corrplot(c2)
```

2) Results:

)
```
> getwd()
[1] "/Users/dkraju/Desktop/DV/R"
> attach(abcd)
The following objects are masked from abcd (pos = 3):

    age, bmi, charges, children, region, sex, smoker

The following objects are masked from abcd (pos = 4):

    age, bmi, charges, children, region, sex, smoker

The following objects are masked from abcd (pos = 5):

    age, bmi, charges, children, region, sex, smoker

The following objects are masked from abcd (pos = 6):

    age, bmi, charges, children, region, sex, smoker

The following objects are masked from abcd (pos = 7):

    age, bmi, charges, children, region, sex, smoker

> under.age=subset(abcd,age<40)
> above.bmi=subset(abcd,bmi>=25)
> abcd.a1=under.age[sample(1:nrow(under.age),100),]
> abcd.a2=above.bmi[sample(1:nrow(higher.bmi),100),]
> abcd.a2=above.bmi[sample(1:nrow(higher.bmi),100),]


> mean(abcd.a1$bmi)
[1] 29.67565
> median(abcd.a1$bmi)
[1] 29.2125
> sd(abcd.a1$bmi)
[1] 6.705276
> IQR(abcd.a1$bmi)
[1] 8.03875
```

```
> boxplot(abcd.a1$bmi,main="bmi of male with 40 age people", col="blue", pch=20)
```




```
> quantile(abcd.a1$charges, probs = seq(0,1,0.1))
      0%       10%       20%       30%       40%       50%       60%       70%       80%
 1135.941  1711.461  2478.431  3197.589  4344.390  4828.792  5951.917 12764.924
17676.772
     90%      100%
33978.577 51194.559
> hist(abcd.a2$charges, cal="yellow", main="above 25 years bmi
value",xlab="charges",ylab="bmi",xlab=((0,10000))
> c1= cor(abcd.a1[,c(1,3,4,7)])
> c2=
+
+   corrplot(c1)
> c2=cor(abcd.a2[,c(1,3,4,7)])
Error in is.data.frame(x) : object 'abcd.a2' not found
> c2= cor(abcd.a2[,c(1,3,4,7)])
Error in is.data.frame(x) : object 'abcd.a2' not found
> corrplot(c2)
>   corrplot(c1)

> hist(abcd.a2$charges, cal="yellow", main="above 25 years bmi
value",xlab="charges",ylab="bmi",xlab=((0,10000))
Error: unexpected ',' in "hist(abcd.a2$charges, cal="yellow", main="above 25 years bmi
value",xlab="charges",ylab="bmi",xlab=((0,"

> quantile(abcd.a1$charges, probs = seq(0,1,0.1))
      0%       10%       20%       30%       40%       50%       60%       70%       80%
 1135.941  1711.461  2478.431  3197.589  4344.390  4828.792  5951.917 12764.924
17676.772
     90%      100%
33978.577 51194.559
```

```
>   corrplot(c1)
> corrplot(c2)
```