STAT 240 - Assignment 2

Problem 1

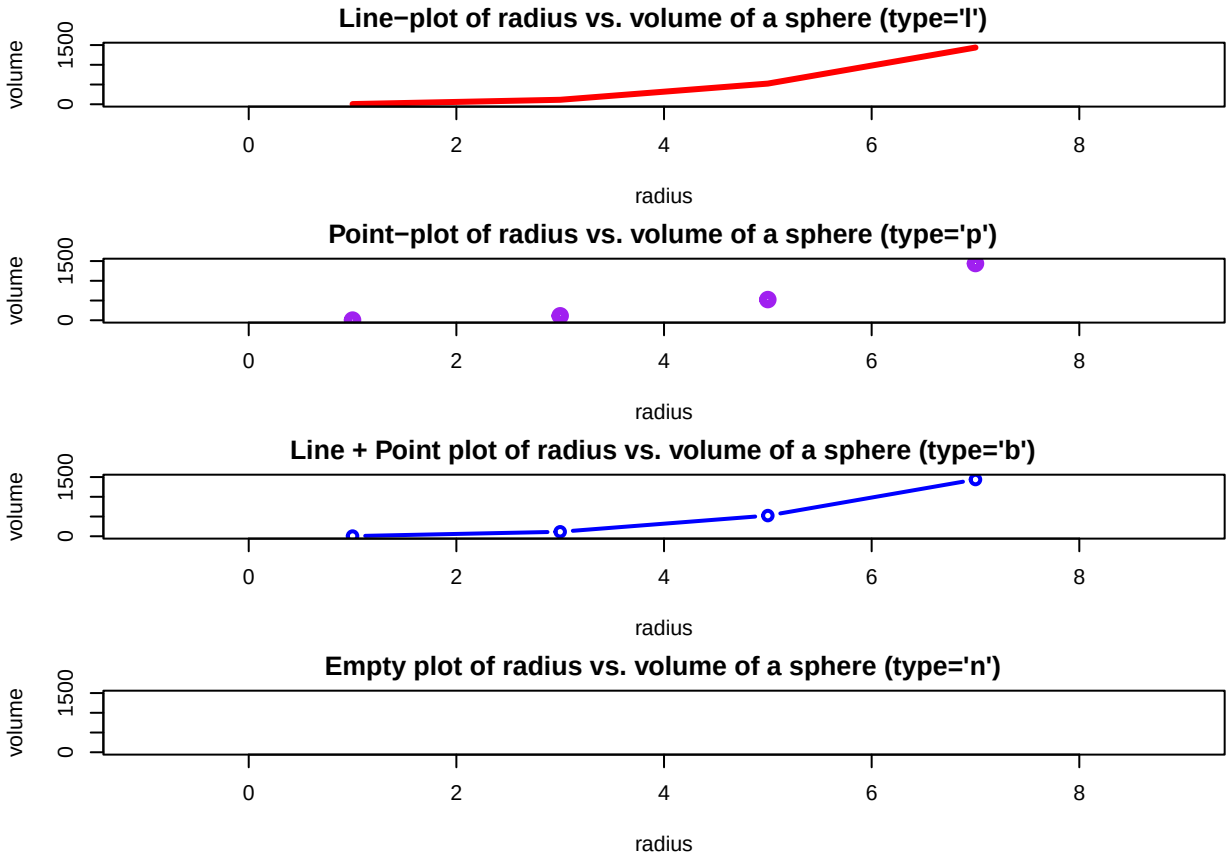
```
radius = c(1, 3, 5, 7)
volume = 4/3*pi*radius^3
par(mfrow=c(4, 1), mar=c(4, 4, 2, 1))

plot(radius, volume, main="Line-plot of radius vs. volume of a sphere (type='l')",
     xlab="radius", ylab="volume",
     ylim=c(0, 1500), xlim=c(-1, 9),
     type='l', col="red", lwd=3)

plot(radius, volume, main="Point-plot of radius vs. volume of a sphere (type='p')",
     xlab="radius", ylab="volume",
     ylim=c(0, 1500), xlim=c(-1, 9),
     type='p', col="purple", lwd=4)

plot(radius, volume, main="Line + Point plot of radius vs. volume of a sphere (type='b')",
     xlab="radius", ylab="volume",
     ylim=c(0, 1500), xlim=c(-1, 9),
     type='b', col="blue", lwd=2)

plot(radius, volume, main="Empty plot of radius vs. volume of a sphere (type='n')",
     xlab="radius", ylab="volume",
     ylim=c(0, 1500), xlim=c(-1, 9),
     type='n', col="black", lwd=3.5)
```


Line−plot of radius vs. volume of a sphere (type='l')
volume
0
1500
0
2
4
6
8
radius
Point−plot of radius vs. volume of a sphere (type='p')
volume
0
1500
0
2
4
6
8
radius
Line + Point plot of radius vs. volume of a sphere (type='b')
volume
0
1500
0
2
4
6
8
radius
Empty plot of radius vs. volume of a sphere (type='n')
volume
0
1500
0
2
4
6
8
radius