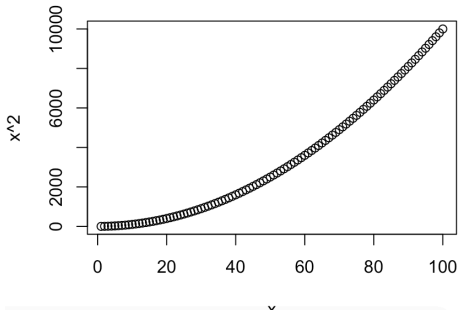
Assignment (Manjeet Singh)

Explore the relationship between the following, where x contains numbers from 1 to 100:

Output

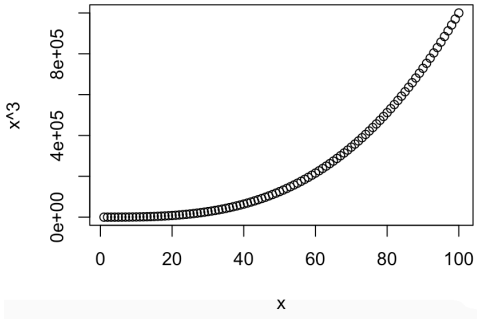
a)

```
> x <- (1:100)
> plot(x,x^2)
>
```



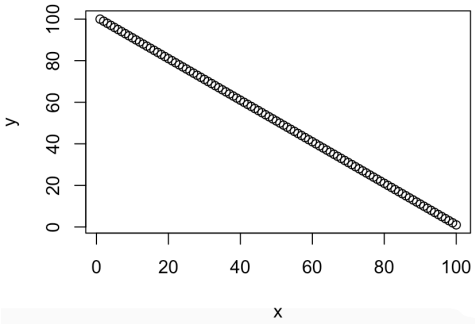
b)

```
> x <- (1:100)
> plot(x,x^2)
> plot(x,x^3)
```



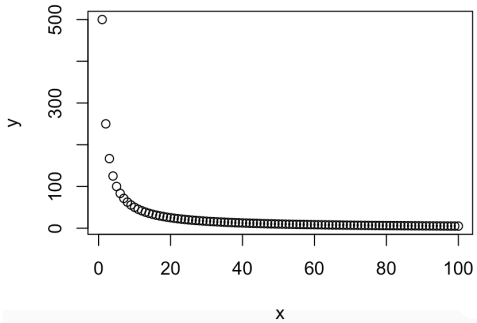
c)

```
> y <- (101-x)
> plot(x,y)
>
```



d)

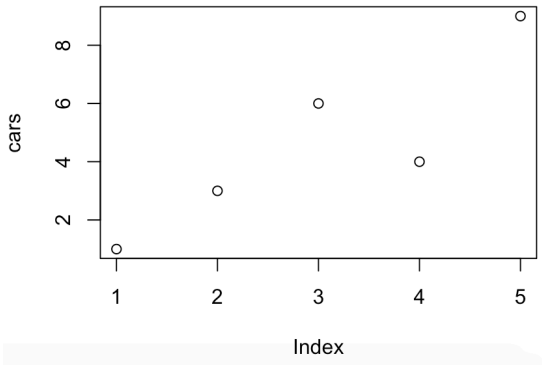
```
> y = 500/x
> plot(x,y)
>
```



#Define the cars vector with 5 values

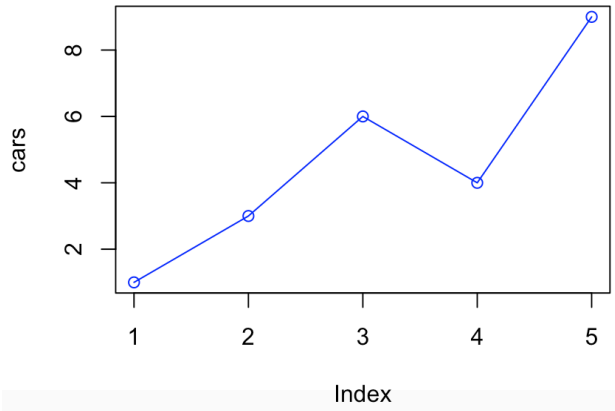
2)

```
> cars <- c(1,3,6,4,9)
> plot(cars)
```



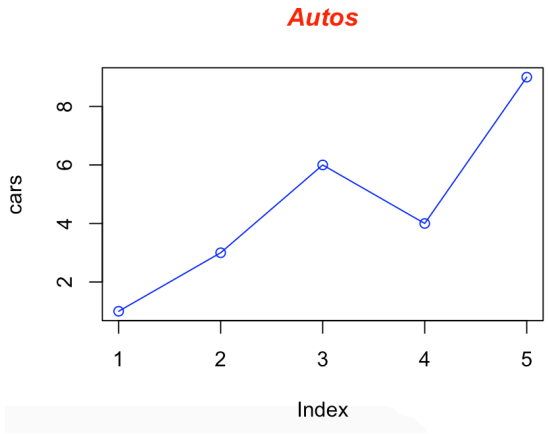
b) #Graph cars using blue points overlayed by a line

```
> cars <- c(1,3,6,4,9)
> plot(cars)
> plot(cars, type ="o", col = "blue")
```



c) #Create a title with a red, bold/italic font

```
title (main = "Autos", col.main = "red", font.main = 4)
```



d) # Define 2 vectors

```
cars <- c(1, 3, 6, 4, 9)
trucks <- c(2, 5, 4, 5, 12)

# Graph cars using a y axis that ranges from 0 to 12
plot(cars, type="o", col="blue", ylim=c(0,12))

# Graph trucks with red dashed line and square points
lines(trucks, type="o", pch=22, lty=2, col="red")

# Create a title with a red, bold/italic font
title(main="Autos", col.main="red", font.main=4)
```