

# Homework #2

February 19, 2019

```
In [16]: ### This is the Python Code
```

```
In [1]: L = [11,22,3.14,'Text']
```

```
In [2]: L
```

```
Out[2]: [11, 22, 3.14, 'Text']
```

```
In [6]: x <- c(11,22,33)
```

```
-----  
  
NameError                                Traceback (most recent call last)  
  
  <ipython-input-6-373de84e30d7> in <module>  
----> 1 x <- c(11,22,33)  
  
NameError: name 'x' is not defined
```

```
In [1]: x <- c(11,22,33)
```

```
In [2]: x
```

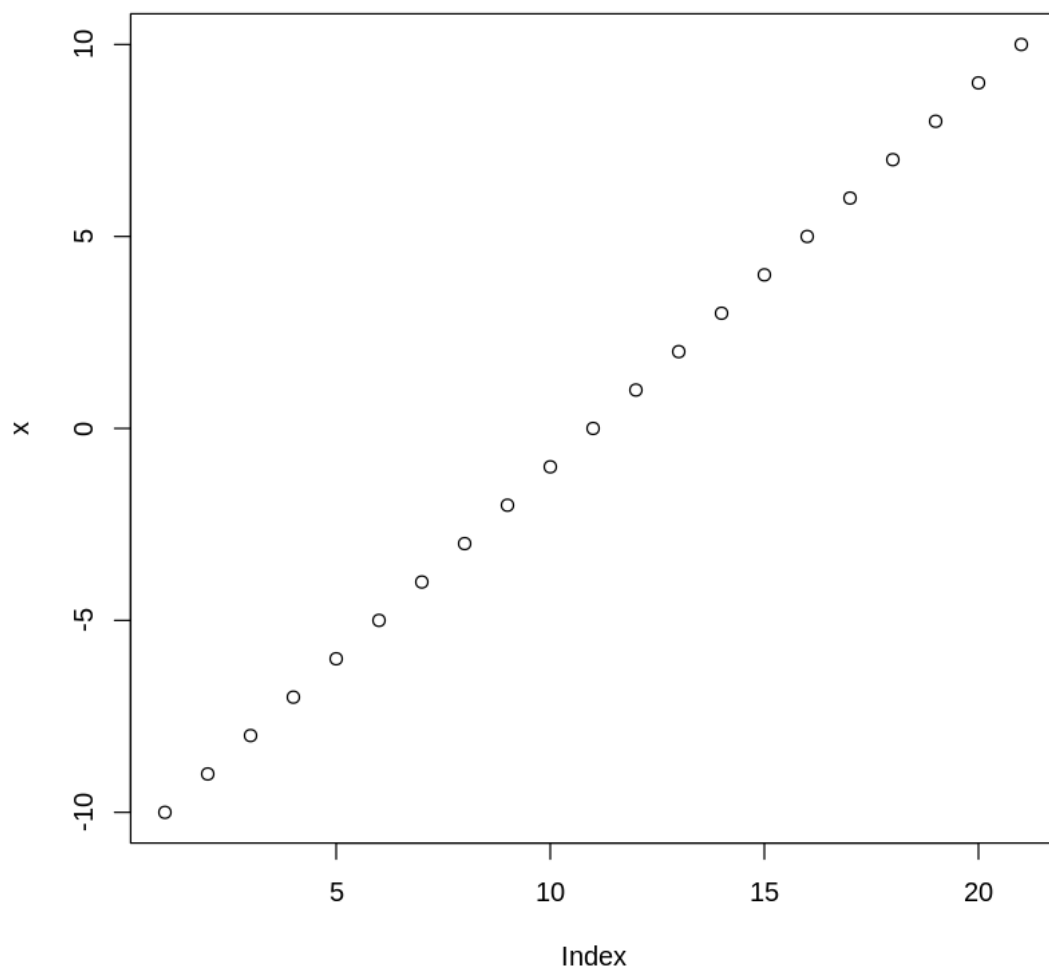
```
1. 11 2. 22 3. 33
```

```
In [3]: x <- c(-10:10)
```

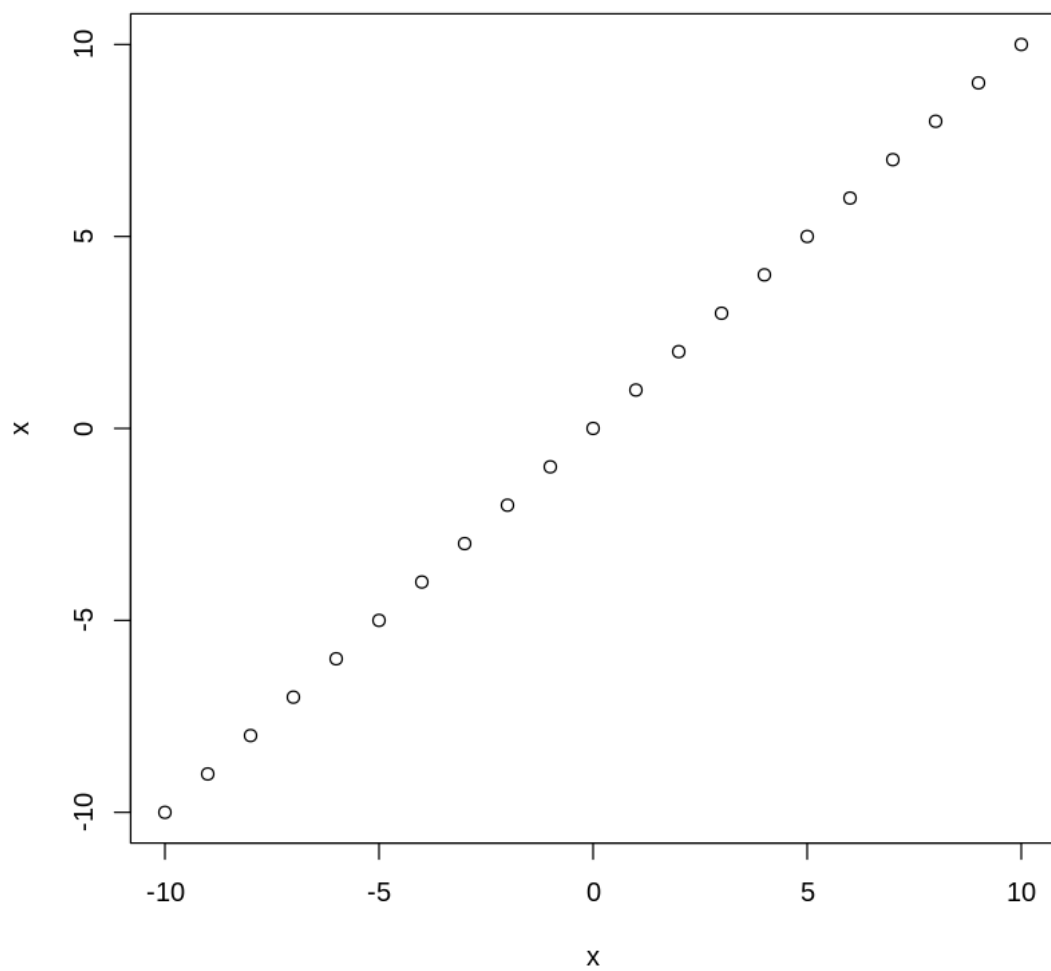
```
In [4]: x
```

```
1. -10 2. -9 3. -8 4. -7 5. -6 6. -5 7. -4 8. -3 9. -2 10. -1 11. 0 12. 1 13. 2 14. 3 15. 4 16. 5 17. 6 18. 7 19. 8  
20. 9 21. 10
```

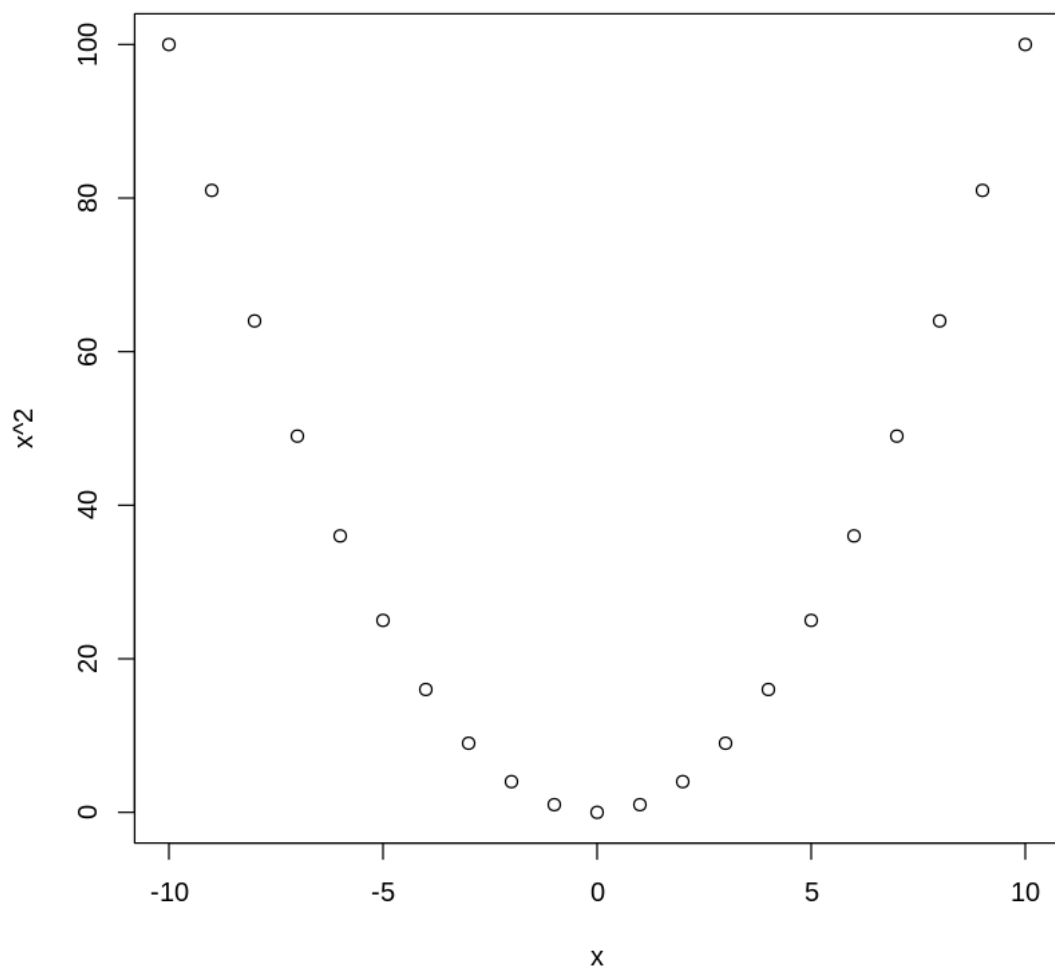
```
In [5]: plot(x)
```



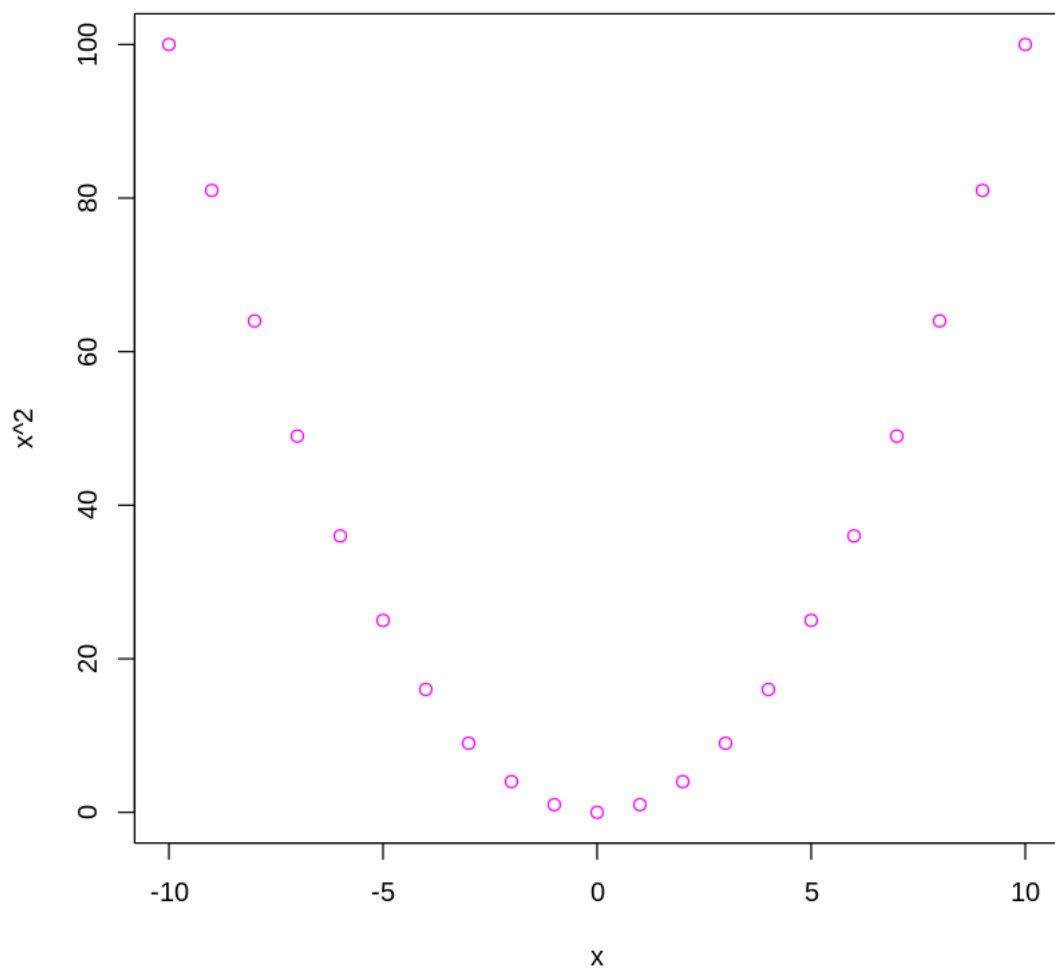
```
In [6]: plot(x,x)
```



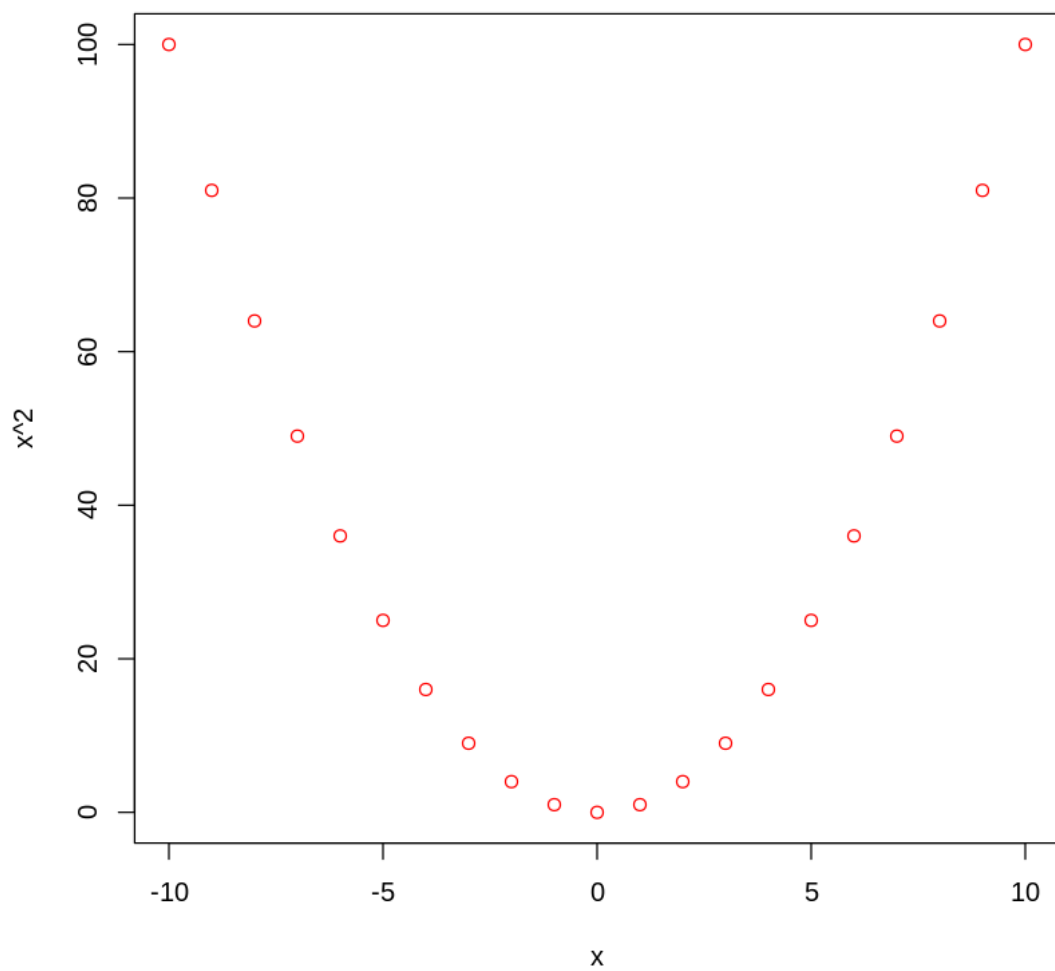
```
In [7]: plot(x, x^2)
```



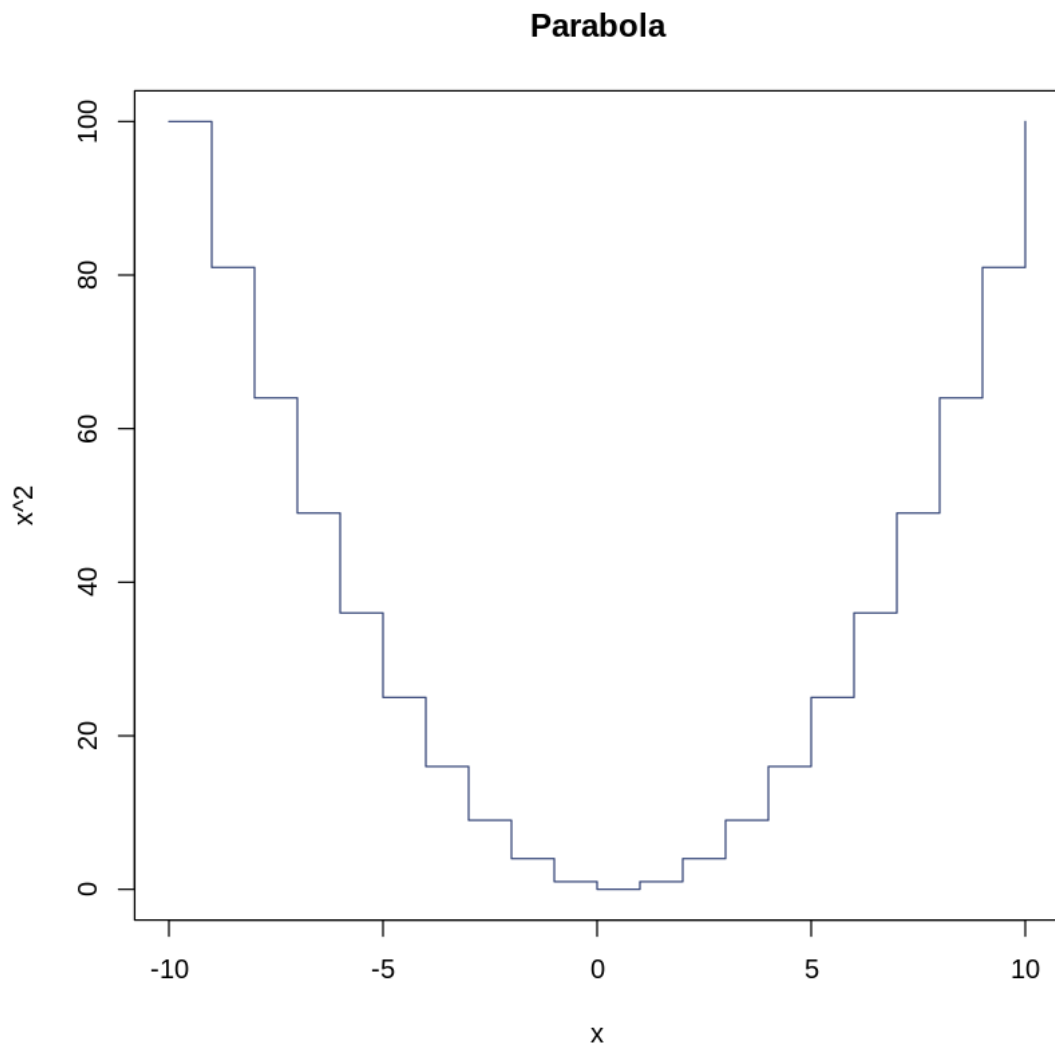
```
In [8]: plot(x, x^2, col = 'magenta')
```



```
In [9]: plot (x,x^2,col ='red')
```



```
In [15]: plot (x,x^2,"s",col = "#334477",main = "Parabola")
```

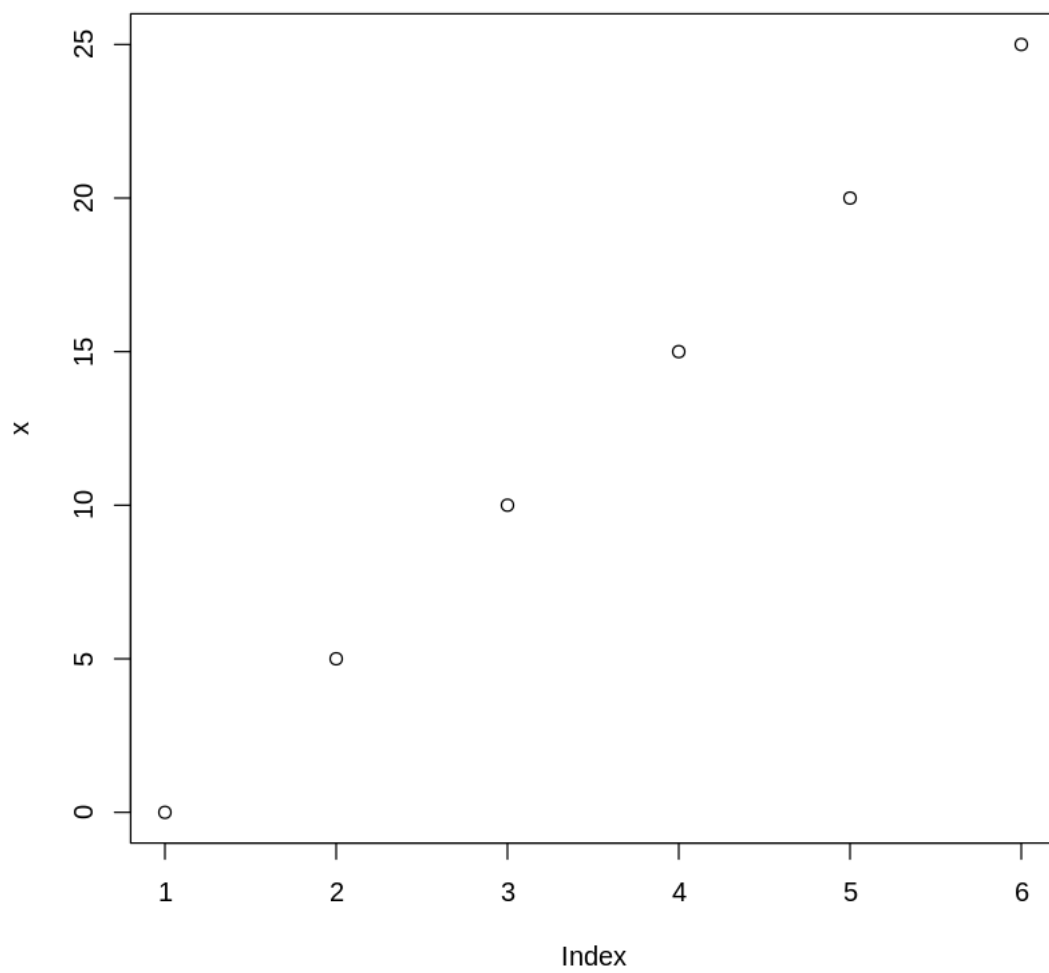


```
In [17]: x <- c(0,5,10,15,20,25)
```

```
In [18]: x
```

```
1. 0 2. 5 3. 10 4. 15 5. 20 6. 25
```

```
In [19]: plot (x)
```



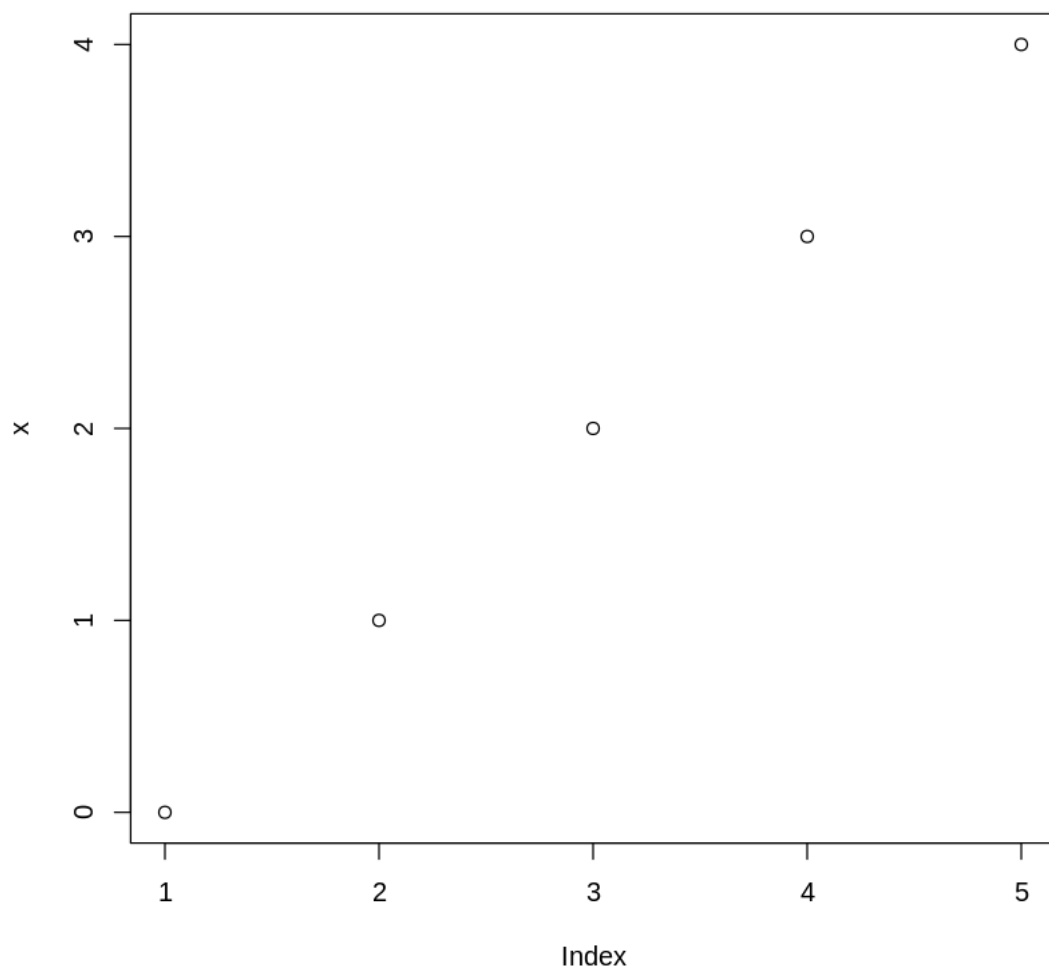
```
In [20]: C
```

```
In [21]: x
```

```
1.0 2.1 3.2 4.3 5.4
```

```
In [22]: plot(x)
```



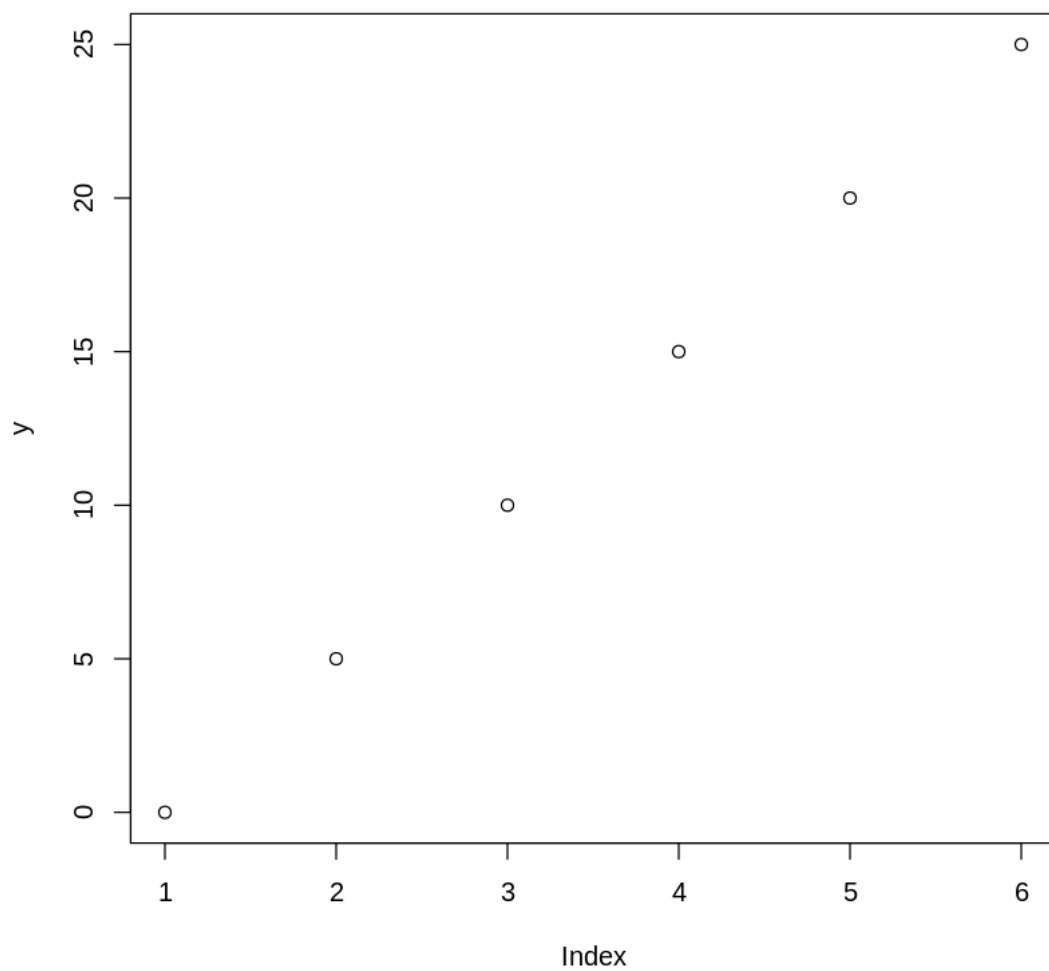


```
In [23]: y <- c(0,5,10,15,20,25)
```

```
In [24]: y
```

```
1. 0 2. 5 3. 10 4. 15 5. 20 6. 25
```

```
In [25]: plot (y)
```



```
In [26]: x <- c(0,1,2,3,4)
```

```
In [27]: x
```

```
1.0 2.1 3.2 4.3 5.4
```

```
In [28]: y <- c(0,5,10,15,20,25)
```

```
In [29]: y
```

```
1.0 2.5 3.10 4.15 5.20 6.25
```

```
In [31]: plot(x, y)
```

```
Error in xy.coords(x, y, xlabel, ylabel, log): 'x' and 'y' lengths differ
Traceback:
```

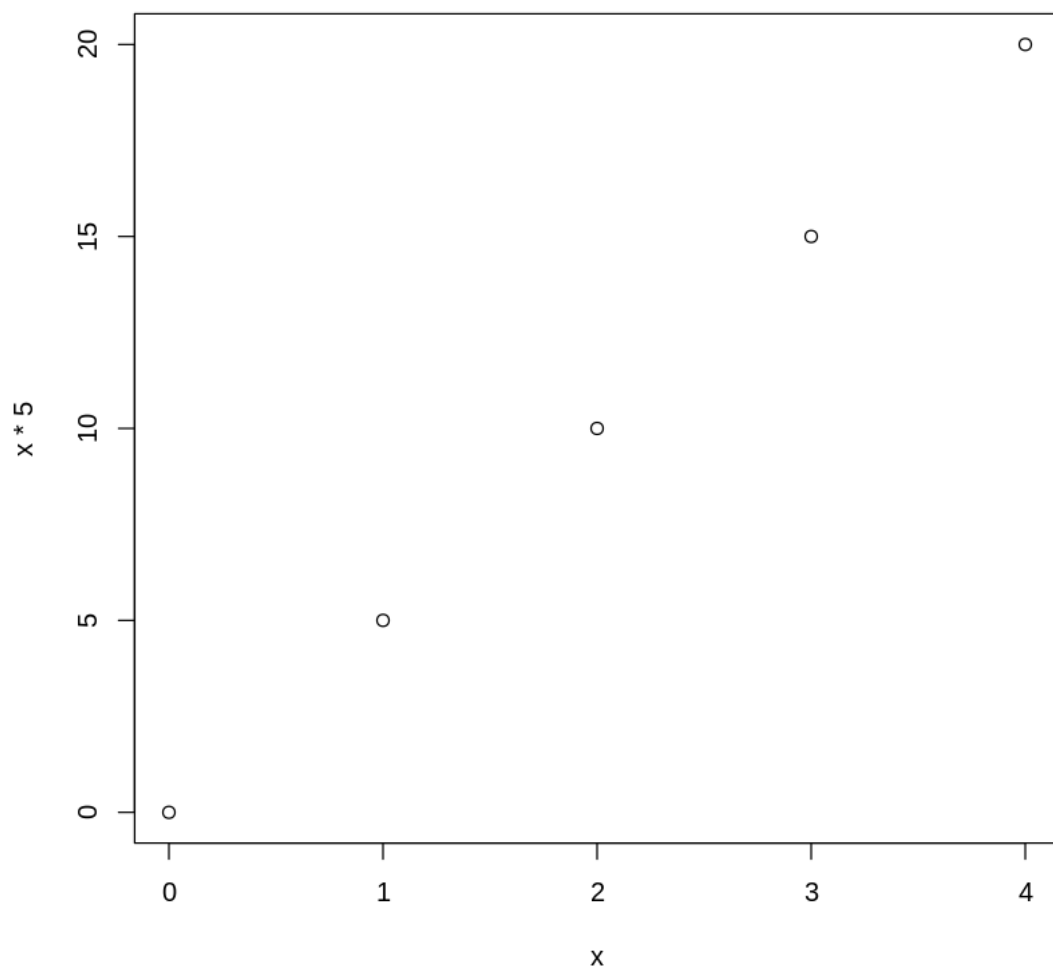
```
1. plot(x, y)
2. plot.default(x, y)
3. xy.coords(x, y, xlabel, ylabel, log)
4. stop("'x' and 'y' lengths differ")
```

```
In [32]: x <- c(0,1,2,3,4)
```

```
In [33]: x
```

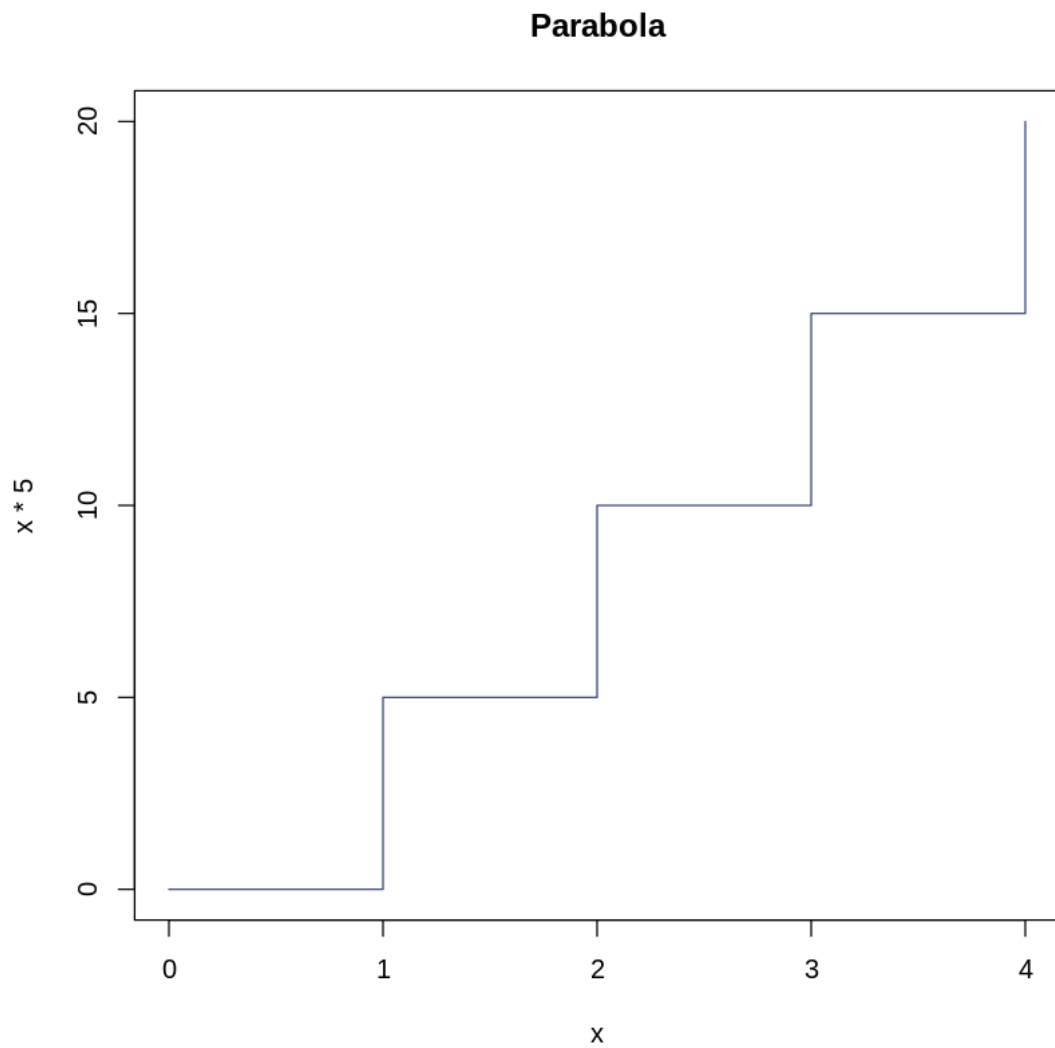
```
1.0 2.1 3.2 4.3 5.4
```

```
In [34]: plot (x,x*5)
```



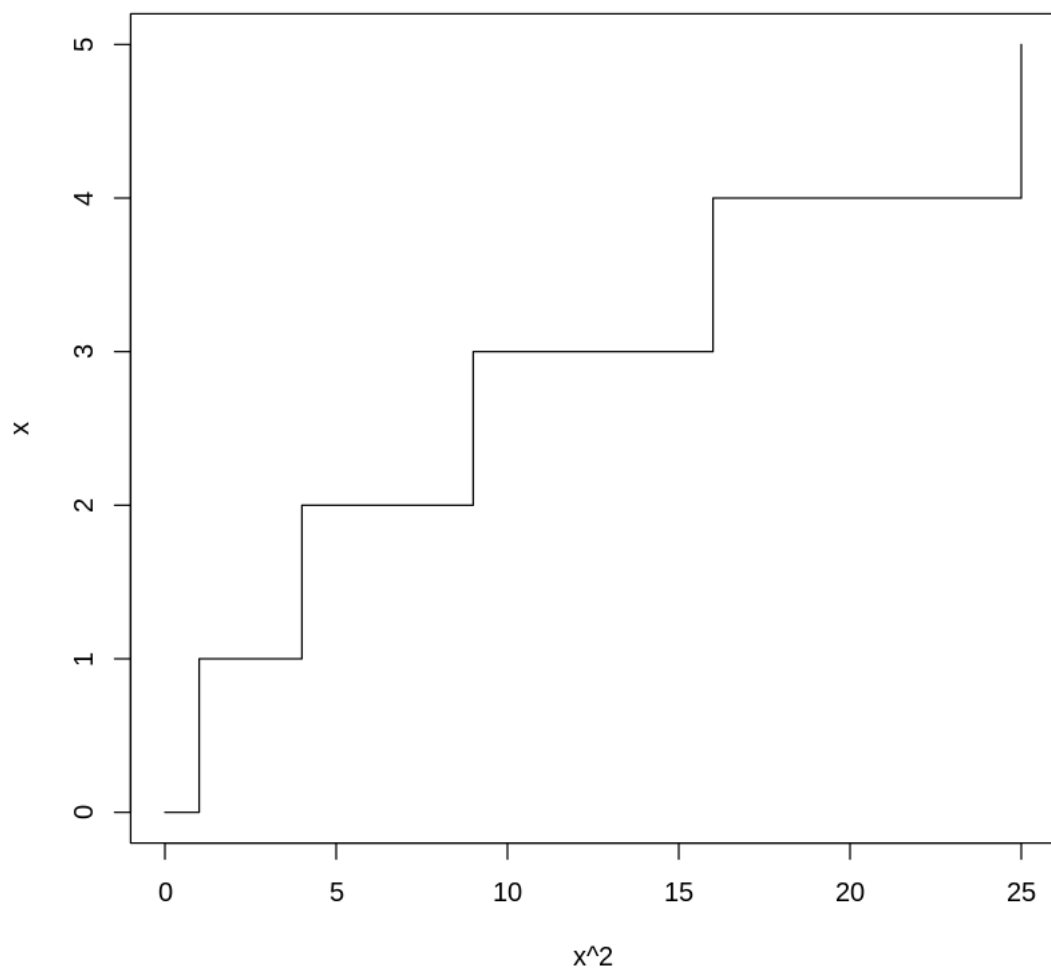
```
In [ ]: x <-c (0,1,2,3,4)
```

```
In [36]: plot (x,x*5,"s",col = "#334477",main = "Vec")
```

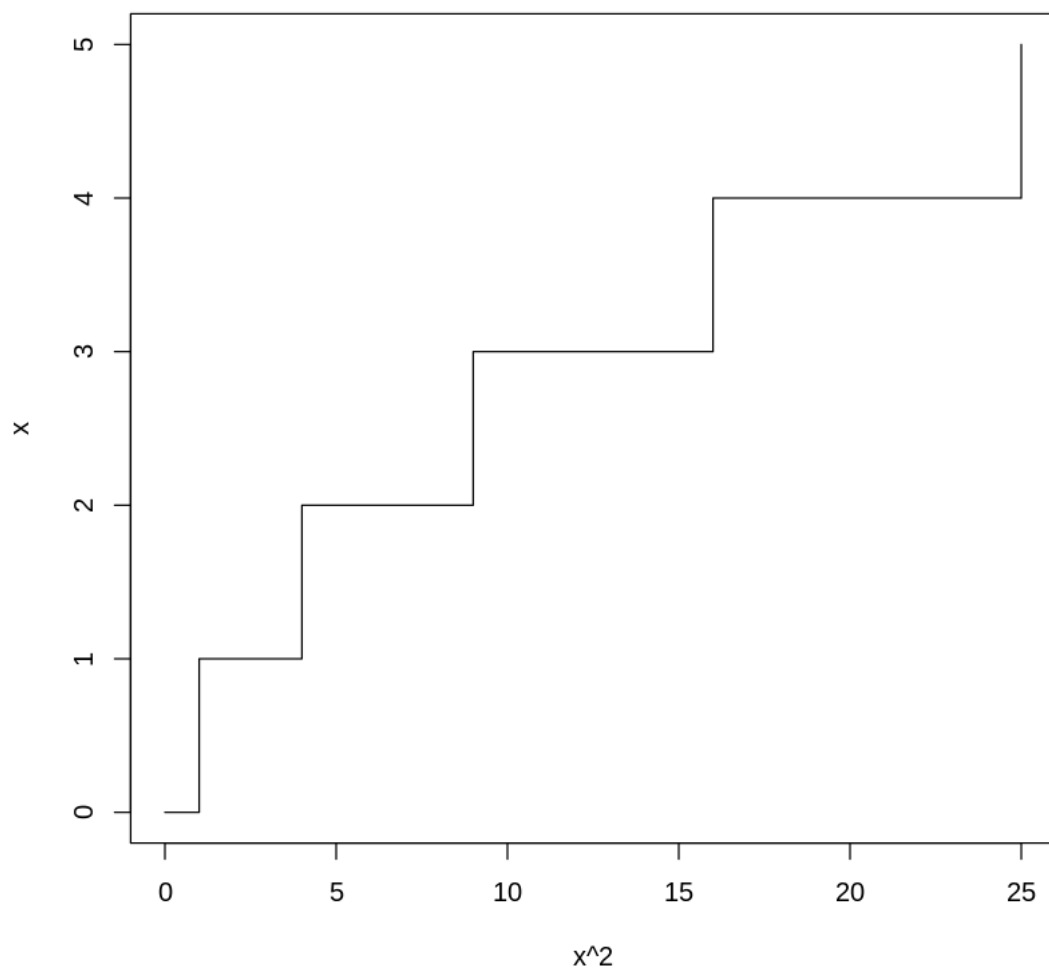


```
In [37]: x <-c (0,1,2,3,4,5)
```

```
In [38]: plot (x^2,x,"s")
```



```
In [39]: plot (x^2,x,"s")
```



```
In [40]: stop("'x' and 'y' lengths differ")
```

```
Error in eval(expr, envir, enclos): 'x' and 'y' lengths differ  
Traceback:
```

```
1. stop("'x' and 'y' lengths differ")
```

```
In [41]: stop("'0' and '4' 0")
```

```
Error in eval(expr, envir, enclos): '0' and '4' 0
```

Traceback:

```
1. stop("'0' and '4' 0")
```

```
In [42]: stop("'x' and 'x^2' lengths differ")
```

Error in eval(expr, envir, enclos): 'x' and 'x^2' lengths differ  
Traceback:

```
1. stop("'x' and 'x^2' lengths differ")
```

```
In [43]: x^2 = (0,1,2)
```

Error in parse(text = x, srcfile = src): <text>:1:9: unexpected '','  
1: x^2 = (0,  
          ^  
Traceback:

```
In [44]: y = (0,0,0,0,1,4)
```

Error in parse(text = x, srcfile = src): <text>:1:7: unexpected '','  
1: y = (0,  
          ^  
Traceback:

```
In [45]: y <- c(0,0,0,0,1,0,2,0,1,4)
```

```
In [46]: plot (x,y)
```

Error in xy.coords(x, y, xlabel, ylabel, log): 'x' and 'y' lengths differ  
Traceback:

```
1. plot(x, y)
```

```
2. plot.default(x, y)
```



```
3. xy.coords(x, y, xlabel, ylabel, log)
```

```
4. stop("'x' and 'y' lengths differ")
```

```
In [3]: ### This is R Code
```

```
In [1]: y <- c(0,0,0,0,1,0,2,0,1,4,1,2,0,0,0,0,0,1,0,1,2,2,0,3,2)
```

```
In [2]: plot (y)
```

