

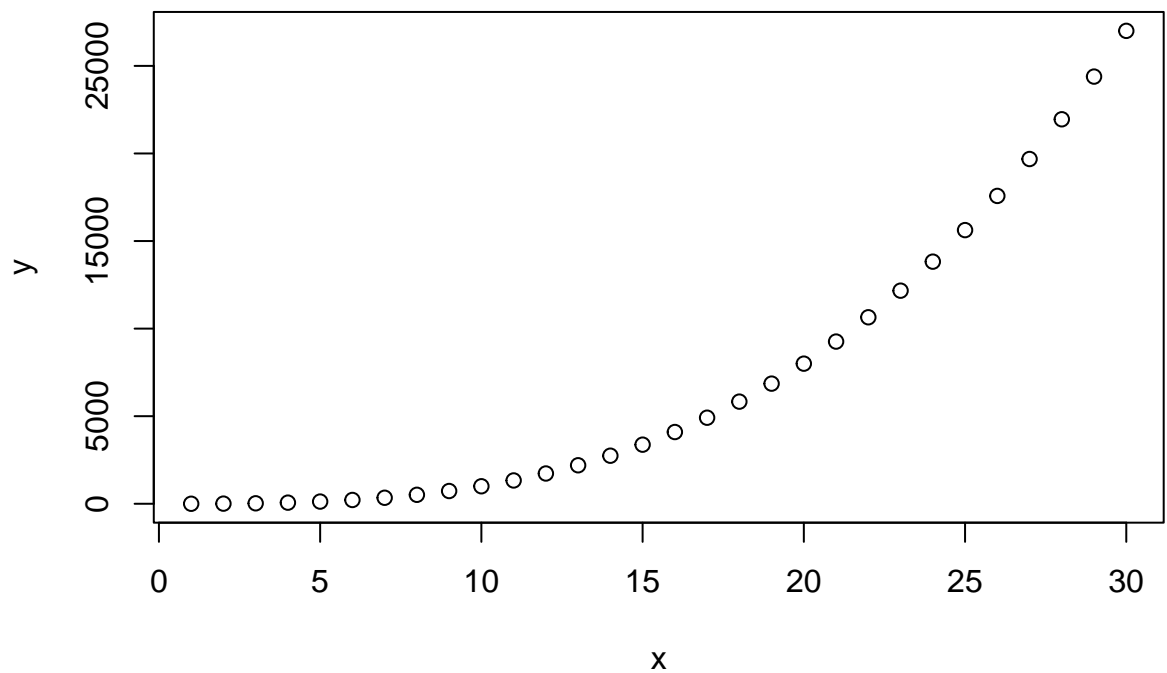
# Project 1: Unit 1

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## Code Execution and Output/Interpretation of Session 4

```
# column vector  
x <- c(1:30)  
y <- x^3  
plot(x,y,)
```



Code Sample 1

*Interpretation:*

- x is column vector having elements 1 to 30.
- y is also vector having elements of x exponentiated of 3.
- plot is a generic function in R to plot, by default scatter plot is plotted.

```
# store the current working using following command:
initial.dir <- getwd()
initial.dir
```

#### Code Sample 2

```
## [1] "C:/Users/SumanPaudel/Desktop/R For Data Science"
```

#### *Interpretation:*

- **initial.dir** object will be assigned the current working directory.

```
# to change the working directory your custom directory
setwd("C:/Users/SumanPaudel/Desktop/R For Data Science")
```

#### Code Sample 3 *Interpretation:*

- **setwd()** function will change the working directory to given path.

```
# loading the necessary packages
library(magrittr)
```

#### Code Sample 4 *Interpretation:*

- In R, the **library()** function will load and attach the required packages.

```
# to set the output file and bypass the output of R console and R Studio
# sink('session5.out')
```

#### Code Sample 5 *Interpretation:*

- In R, the **sink()** function will set the output file and bypass the output of R console and R Studio.
- when executing that part of code in markdown throws an error like this: Error in stdout() : invalid connection Calls: ... -> setTxtProgressBar -> -> cat -> stdout Error in stdout() : invalid connection Calls: ... process\_file -> -> cat\_line -> cat -> stdout Execution halted

## When Not to Use the Pipe

The pipe (`%>%`) is a powerful tool in R, but it's not always the best choice for every situation. Here are some scenarios where we might want to consider alternative approaches:

- If pipes involves more than ten steps, consider breaking it down into smaller chunks with meaningful intermediate objects. This makes debugging easier and improves code readability.
- Pipes work best when transforming a single primary object. If you're dealing with multiple inputs or combining several outputs, the pipe may not be the most suitable tool.
- When your code starts resembling a directed graph with intricate dependencies, using pipes can lead to confusing and convoluted code.