**R Basics Exercise**[**¶**](#gjdgxs)

* Basic Data Types
* Basic Arithmetic
* Vector
* Vector Operations
* Comparison operators
* Vector Selection and Indexing

**What is two to the power of five?**

In [1]:

x<-2^5

x

Out[1]:

32

**Create a vector called stock.prices with the following data points: 23,27,23,21,34**

In [4]:

stock.prices<-cat(c(23,27,23,21,34),sep = "\n")

Out[4]:

1. 23
2. 27
3. 23
4. 21
5. 34

**Assign names to the price data points relating to the day of the week, starting with Mon, Tue, Wed, etc...**

In [6]:

stock.prices<-c(23,27,23,21,34)

names(stock.prices)<-c("Mon","Tue","Wed","Thur","Fri")

names(stock.prices)

stock.prices

o/p:

> stock.prices

Mon Tue Wed Thur Fri

23 27 23 21 34

**What was the average (mean) stock price for the week? (You may need to reference a built-in function)**

In [7]:

average<-function(mean){

mean=mean(stock.prices)

mean

}

average(mean)

Out[7]:

25.6

**Create a vector called over.23 consisting of logicals that correspond to the days where the stock price was more than $23**

In [8]:

stock.prices>23

o/p:

> stock.prices>23

[1] FALSE TRUE FALSE FALSE TRUE

**Use the over.23 vector to filter out the stock.prices vector and only return the day and prices where the price was over $23**

In [9]:

> which(stock.prices>23)

[1] 2 5

Out[9]:

Tues 27 Fri 34

**Use a built-in function to find the day the price was the highest**

In [16]:

max(stock.prices)

Out[16]:

**Fri:** 34