Regex

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Assignment 4

First I read the dataset in using read.csv.

```
MData <- read.csv("Data/measurements.csv")</pre>
```

Then, I used the dplyr package to create a new column for the dataset called "Sp", which contained only the first letter of the genus followed by a period and the species.

```
library(dplyr)

## Warning: package 'dplyr' was built under R version 3.5.3

##

## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':

##

## filter, lag

## The following objects are masked from 'package:base':

##

## intersect, setdiff, setequal, union

MData <- mutate(MData, Sp= sub("\\B.+ ", ". ", Species))

library(knitr)

kable(MData, caption="\\label{mdata} Measurements data with both the species names and the abbreviated</pre>
```

Table 1: Measurements data with both the species names and the abbreviated species names.

X	Species	Limb.Width	unitsW	Limb.Length	unitsL	Sp
1	Loxodonta africana	8.042456	cm	65.05139	mm	L. africana
2	Lycaon pictus	29.213921	cm	166.66237	mm	L. pictus
3	Thunnus alalunga	12.717232	cm	65.20789	cm	T. alalunga
4	Inia geoffrensis	5.237838	cm	198.96262	mm	I. geoffrensis
5	Panthera pardus orientalis	23.287809	mm	166.71275	cm	P. orientalis
6	Vulpes lagopus	10.857432	mm	76.34388	cm	V. lagopus
7	Canis lupus arctos	10.492155	mm	257.06748	mm	C. arctos
8	Elephas maximus indicus	16.014773	cm	126.31541	mm	E. indicus
9	Delphinapterus leucas	3.221663	mm	32.05398	cm	D. leucas
10	Thunnus obesus	22.560168	mm	111.17965	mm	T. obesus

I then created a table containing only the Sp column and not the Species column (I assumed that we were to keep all of the other columns, but if not please refer to the commented-out code).

```
MData.2 <- select(MData, Sp, Limb.Width, unitsW, Limb.Length, unitsL)
kable(MData.2, caption="\\label{mdata.2} Measurements data with only the abbreviated species names.")</pre>
```

Table 2: Measurements data with only the abbreviated species names. $\,$

Sp	Limb.Width	unitsW	Limb.Length	unitsL
L. africana	8.042456	cm	65.05139	mm
L. pictus	29.213921	cm	166.66237	mm
T. alalunga	12.717232	cm	65.20789	cm
I. geoffrensis	5.237838	cm	198.96262	mm
P. orientalis	23.287809	mm	166.71275	cm
V. lagopus	10.857432	mm	76.34388	cm
C. arctos	10.492155	mm	257.06748	mm
E. indicus	16.014773	cm	126.31541	mm
D. leucas	3.221663	mm	32.05398	cm
T. obesus	22.560168	mm	111.17965	mm

 $\textit{\#MData.2} \; \gets \; \textit{select(MData, Sp)}$