HW1

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1. Write a code to determine the weighted average for a student in this class whose homework average is 94.3, exam 1 grade is 86.1, exam 2 grade is 88.5 and final project grade is 83. Also determine the letter grade for this student. [Hint: Use the grading scheme on the syllabus.]

```r
e1<- 94.3*.3
e2<- 86.1 * .2
e3<- 88.5*.2

p1<- 83 *.3

sum<-e1+e2+e3+p1
sprintf("the weighted average for student is: %f which is a B+", sum)
```

```
## [1] "the weighted average for student is: 88.110000 which is a B+"
```

2.[Indicate True or False] The following variable names are valid in R. (a) 2018_Revenue - False (b) .2018.Revenue - False (c) .Revenue.2018 - True (d) _Revenue_2018 - False (e) Revenue2018 - True (f) Revenue 2018 - False (g) Revenue(2018) - False (h) Revenue_2018 - True (i) Revenue.2018 - True (j) Revenue.2018. - True

3. Create and output the following sequences. You may use the concatenate function to combine two sequences, but not as the only mechanism to yield the answer.

```r
print(rep("Q1",4))
```

```
## [1] "Q1" "Q1" "Q1" "Q1"
```

```r
print(seq(50,100, 2.5))
```

```
##  [1]  50.0  52.5  55.0  57.5  60.0  62.5  65.0  67.5  70.0  72.5  75.0  77.5
## [13]  80.0  82.5  85.0  87.5  90.0  92.5  95.0  97.5 100.0
```

```r
print(rep(2010:2017, each=4))
```

```
##  [1] 2010 2010 2010 2010 2011 2011 2011 2011 2012 2012 2012 2012 2013 2013 2013
## [16] 2013 2014 2014 2014 2014 2015 2015 2015 2015 2016 2016 2016 2016 2017 2017
## [31] 2017 2017
```

```r
print(rep(2016:2017, each= 4))
```

```
## [1] 2016 2016 2016 2016 2017 2017 2017 2017
```

```r
print(c(1295:1300, seq(1299,1290,-1)))
```

```
##  [1] 1295 1296 1297 1298 1299 1300 1299 1298 1297 1296 1295 1294 1293 1292 1291
## [16] 1290
```

```r
print(seq(4160,3530, -105))
```

```
## [1] 4160 4055 3950 3845 3740 3635 3530
```

4. Import ClassData in R and save the resulting data frame. Write a code to output a frequency table of the Sport variable.

```
class_data<- read.csv("/cloud/project/ClassData.csv")
#View(class_data)
Sport<-table(class_data$Sport)
print(Sport)
```

```
##
##    Baseball Basketball      Boxing    Football     Lacrose        None   Ping pong
##          11        111           3          72           5          24           5
##      Soccer      Tennis
##          52          15
```

5. The nycflights13 package contains data on all flights leaving the three major airports in the New York City area in 2013. One of the datasets in this package is the flights data. Install and load the nycflights13 package. Using the flights dataset, write a code to output the five number summary of the dep_delay variable.

```
library(nycflights13)
summary(flights$dep_delay)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
## -43.00   -5.00   -2.00   12.64   11.00 1301.00    8255
```