Financial Analysis

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```
#Data----
revenue <- c(14574.49, 7606.46, 8611.41, 9175.41, 8058.65,
             8105.44, 11496.28, 9766.09, 10305.32, 14379.96,
             10713.97, 15433.50)
expenses <- c(12051.82, 5695.07, 12319.20, 12089.72,
              8658.57, 840.20, 3285.73, 5821.12,
              6976.93, 16618.61, 10054.37, 3803.96)

# Question----
# Find the:

# 1) Profit for each month
# 2) Profit after tax for each month (30% tax rate)
# 3) Profit margin for each month - equals to profit after tax divided by revenue
# 4) Good months - where the profit after tax was greater than the mean for the year
# 5) Bad months - where the profit after tax was less than the mean for the year
# 6) The best month - where the profit after tax was max for the year
# 7) The worst month - where the profit after tax was min for the year

# Stipulations:

#1) All results need to be presented as vectors
#2) Results for dollar values need to be calculated with $0.01 precision, but need to be
#   presented in units of $1000 with no decimal points.
#3) Results for the profit margin ratio need to be presented in units of % with no decimal
#   points.


# Profit for each month----

profit <- revenue - expenses
print(as.integer(profit))
```

```
##  [1]  2522  1911 -3707 -2914  -599  7265  8210  3944  3328 -2238   659 11629
```

```
# Profit after tax for each month (30% tax rate)----

taxedprofit <- profit * 0.7
print(as.integer(taxedprofit))
```

```
##  [1]  1765  1337 -2595 -2040  -419  5085  5747  2761  2329 -1567   461  8140
```

```r
# Profit margin for each month - equals to profit after tax divided by revenue----

profitmargin <- (taxedprofit/revenue)*100
print(as.integer(profitmargin))
```

```
##  [1]  12  17 -30 -22  -5  62  49  28  22 -10   4  52
```

```r
# Good months - where the profit after tax was greater than the mean for the year----

taxedprofitmean <- mean(taxedprofit)

monthcounter <- 1

for(i in taxedprofit){if(i>taxedprofitmean){print(monthcounter)

  }
monthcounter <- monthcounter+1}
```

```
## [1] 1
## [1] 6
## [1] 7
## [1] 8
## [1] 9
## [1] 12
```

```r
# Bad months - where the profit after tax was less than the mean for the year----

monthcounter <- 1

for(i in taxedprofit){if(i<taxedprofitmean){print(monthcounter)

}
  monthcounter <- monthcounter+1}
```

```
## [1] 2
## [1] 3
## [1] 4
## [1] 5
## [1] 10
## [1] 11
```

```r
# The best month - where the profit after tax was max for the year----

print(which.max(taxedprofit))
```

```
## [1] 12
```

```r
# The worst month - where the profit after tax was min for the year----

print(which.min(taxedprofit))
```

```
## [1] 3
```