

LAB-3

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Question 1

```
Inflation.df <- read.csv('inflation_consumer.csv')
```

```
num_of_observations <- nrow(Inflation.df)
num_of_variables <- ncol(Inflation.df)
```

```
#a)
num_of_observations
```

```
## [1] 11014
```

```
#b)
num_of_variables
```

```
## [1] 4
```

```
#c)
mean_year <- mean(Inflation.df[, "Year"])
print('This Indicates that the times span with the highest inflation was around 1992')
```

```
## [1] "This Indicates that the times span with the highest inflation was around 1992"
```

```
mean_year
```

```
## [1] 1992.21
```

```
#d)
index_lowest <- which.min(Inflation.df[, "Inflation"])

lowest_inflation_country <- Inflation.df[index_lowest, "Country"]

lowest_inflation_year <- Inflation.df[index_lowest, "Year"]

lowest_inflation_country
```

```
## [1] "Indonesia"
```

```
lowest_inflation_year
```

```
## [1] 1966
```

```
#e)
index_highest <- which.max(Inflation.df[, "Inflation"])

highest_inflation_country <- Inflation.df[index_highest, "Country"]

highest_inflation_year <- Inflation.df[index_highest, "Year"]

highest_inflation_country
```

```
## [1] "Congo, Dem. Rep."
```

```
highest_inflation_year
```

```
## [1] 1994
```

Question 2

```
Inflation.df <- read.csv('inflation_consumer.csv')

#a)
inflation_over_seven <- Inflation.df[, "Inflation"] > 7
Sub_Inflation <- data.frame(Inflation.df[inflation_over_seven,])
head(Sub_Inflation)
```

##	Country	Country.Code	Year	Inflation
## 5	Arab World	ARB	1973	11.56
## 6	Arab World	ARB	1974	26.92
## 8	Arab World	ARB	1976	7.52
## 9	Arab World	ARB	1977	9.72
## 10	Arab World	ARB	1978	7.44
## 11	Arab World	ARB	1979	15.05

```
#b)
avg.inflation <- mean(Inflation.df[, "Inflation"])
avg.inflation
```

```
## [1] 27.77689
```

```
#c)
inflation_over_fifteen <- Sub_Inflation[, "Inflation"] > 15
length(Sub_Inflation[inflation_over_fifteen, "Inflation"])
```

```
## [1] 1737
```

```
#d)
Inflation_Status <- factor(Sub_Inflation$Inflation > 15, levels = c(FALSE, TRUE), labels = c("Low", "High"))
table(Inflation_Status)
```

```
## Inflation_Status
## Low High
## 2885 1737
```