SET - 5

1)

a)

```
# Create the data frame
df <- data.frame( Item = c("Baby food", "Cereal", "Office supplies", "Fruits", "Office supplies", "Household",
"Household"),
OrderPriority = c(1, 2, 3, 1, NA, 3, 3),
UnitPrice = c(255.28, 205.7, NA, 9.33, 651.21, 668.27, 668.27),
UnitsSold = c(9925, 2804, 1779, 8102, 5062, 8974, NA),
stringsAsFactors = FALSE )
# Print the data frame
df
```

b)

```
mean_order_priority <- mean(df$OrderPriority, na.rm = TRUE)
df$OrderPriority <- replace(df$OrderPriority, is.na(df$OrderPriority), mean_order_priority)
```

c)

```
median_units_sold <- median(df$UnitsSold, na.rm = TRUE)
df$UnitsSold <- replace(df$UnitsSold, is.na(df$UnitsSold), median_units_sold)
```

d)

```
df <- na.omit(df)
```

e)

```
df$UnitPrice <- unique(df$UnitPrice)
```

f)

```
total_missing <- sum(is.na(df)) cat("Total number of missing values in df:", total_missing, "\n")
```

2)

```
# Load the mtcars dataset
data(mtcars)
# Fit the Poisson regression model
model <- glm(mpg ~ ., data = mtcars, family = poisson)
# Print the model summary
summary(model)
```

3)

```
# Character vector with white spaces
text <- c("Hello ", " World", " Open AI ")
# Remove white spaces text <- gsub("\\s", "", text)
# Print the modified character vector
print(text)
```