PS Lab 05 -IT24102279

```
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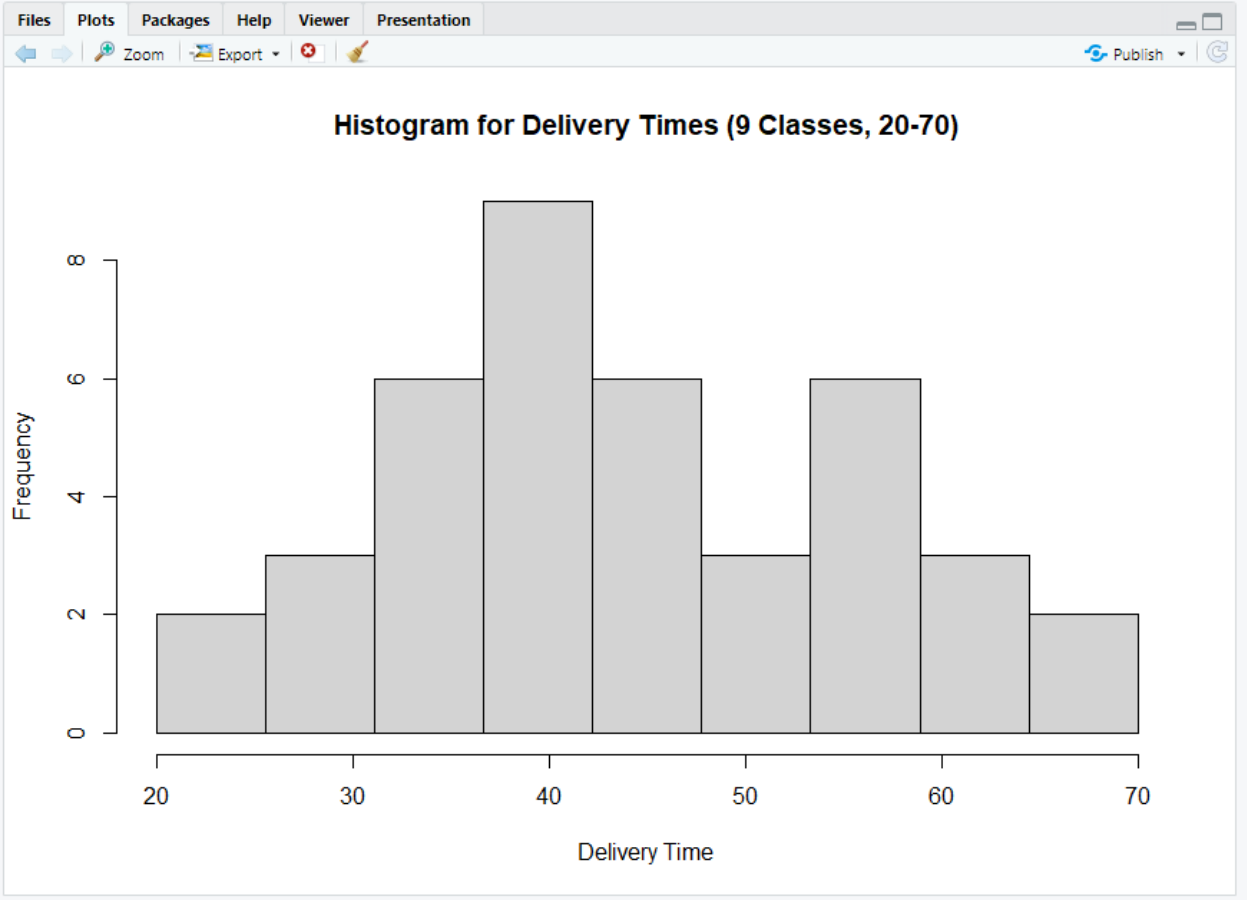
> setwd("C:\\Users\\Uni\\OneDrive - Sri Lanka Institute of Information Technology\\Y2S1\\Probability and Statistics - IT2120\\Labs\\Ongoing\\Ongoing\\Lab05")
> # 1. Import the dataset into a data frame called "Delivery Times"
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header=TRUE)
> # 2. Draw a histogram for delivery times using nine class intervals where the lower limit is 20 and upper limit is 70
> bins_dt <- seq(20, 70, length.out=10)
> hist(Delivery_Times$Delivery_Time_.minutes, breaks=bins_dt, right=TRUE, main="Histogram for Delivery Times (9 Classes, 20-70)", xlab="Delivery Time", ylab="Frequency")
>
```



Comment on the Shape of the distribution

The highest frequency is observed in the 40-50 class interval

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> # 4. Draw a cumulative frequency polygon (ogive) for the data in a separate plot
> freq_dt <- as.vector(table(cut(Delivery_Times$Delivery_Time_.minutes, breaks=bins_dt, right=TRUE)))
> cum_freq_dt <- cumsum(freq_dt)
> upper_limits_dt <- bins_dt[-1]
> plot(upper_limits_dt, cum_freq_dt, type="o", main="Cumulative Frequency Polygon (Ogive) for Delivery Times", xlab="Upper Class Limits", ylab="Cumulative Frequency", pch=16)
>
```

Data	
Delivery_Times	40 obs. of 1 variable
values	
bins_dt	num [1:10] 20 25.6 31.1 36.7 42.2 ...
cum_freq_dt	int [1:9] 0 3 9 18 24 27 33 36 38
freq_dt	int [1:9] 0 3 6 9 6 3 6 3 2
upper_limits_dt	num [1:9] 25.6 31.1 36.7 42.2 47.8 ...

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