Introduction to Business Analytics with R

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Task 1

Use a code chunk to create a datetime object d from the following character string that represents November 14, 2025: "11/20/2025". Only use base R. Do not use functions from the lubridate package.

```
d <- c("11/20/2025")
```

This code chunk will create the d dataframe

Task 2

Use a new code chunk to check the data type of the d object by printing it. If it is in a date format, then it will show up as "2025-11-20".

```
class(d)
```

```
## [1] "character"
```

Checking what is the type of data for d

Task 3

If necessary, install the lubridate package using the Package pane in RStudio. In a new code chunk, load the lubridate package.

```
library(lubridate)
```

```
##
## Attaching package: 'lubridate'
```

```
## The following objects are masked from 'package:base':
##
##     date, intersect, setdiff, union
```

This is to load installed lubridate package

Task 4

In a new code chunk, use the appropriate functions from the lubridate package to extract the year, month number, week number and weekday number from the object d created above. Save them as objects name d_year, d_month, d_week, and d_day respectively. Include code to display each of the four objects.

```
#Parsing the date first as it's in character format
d_parsed <- mdy(d)

#Extracting the year, month, week, date
d_year <- year(d_parsed)
d_month <- month(d_parsed)
```

```
d_week <- week(d_parsed)
d_day <- day(d_parsed)
```

This is to create new object as per instruction

Task 5

Use a new code chunk to create another datetime object, d_25, using the object d, where d_25 is the date 25 days from now. Include code to display d_25.

```
d_25 <- mdy(d) +25
print(d_25)
```

```
## [1] "2025-12-15"
```

This is to show the date that is 25 days after d

Task 6

Finally, use a new code chunk to calculate and display the difference between d and d_25 using the difftime function and check whether the difference is 25 days.

```
print(difftime(d_25,mdy(d)))
```

```
## Time difference of 25 days
```

To confirm that the difference between d_25 and d is 25 days.