

1. Using the `Global Superstore.xls` do the following:

(a) (3 points) Load the `Orders` sheet.

(b) (4 points) Create a new field called `Half Year` using the below formula.

```
IF DATEPART('month', [Order Date]) < 7
    THEN '1st half of year'
    ELSE '2nd half of year'
END
```

(c) (5 points) Create a visualization that shows the total sales for each half of the year. Also, include `Sub-Category` as filter.

(d) (3 points) Select `Phones` in the filter from your visualization in part (c). Which half of the year has the higher sales?

(e) (5 points) Open a new worksheet. Create a new parameter called `Product Search`, set the data type to string, and leave the current value blank. After the parameter has been created, add the associated parameter control to the view. Then, create a new calculated field, call it `Product Match`, and enter the following formula:

```
CONTAINS(LOWER([Product Name]), LOWER([Product Search]))
```

(f) (5 points) Create a visualization that shows the total sales by product name.

(g) (3 points) Enter `apple` in the `Product Search`. What is the most selling apple product?

¹Make sure you submit a `*.twb` file in Blackboard.