

HARNESSING RAW DATA FROM SUBMISSION FORMS TO GAUGE FOOD INSECURITY AMONG COLLEGE STUDENTS

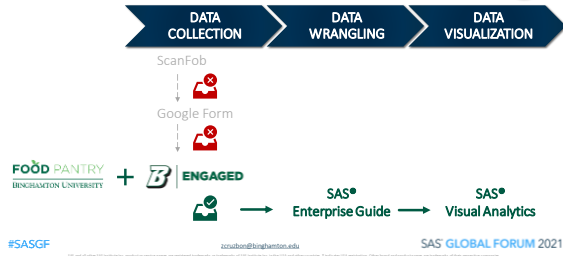
Presentation goals...

- ☉ Showcase the aggregation of raw data from several *.csv files.
- ☉ Demonstrate functions for parsing time-series data.
- ☉ Introduce options for embedding program code in a point-and-click graphical interface (i.e., SAS® Enterprise Guide).
- ☉ Briefly highlight the integration of SAS® Visual Analytics for reporting data graphically.

At the conclusion, you will...

- 👍 Develop the competency to distinguish between the append table task and match-merge as distinct methods for compiling multiple time-series data.
- 👍 Comprehend the applications of functions such as INTNX and COMPRESS.
- 👍 Recognize options for inserting custom code.
- 👍 Attribute SAS® Visual Analytics as a tool for communicating the story behind the data.

**FINDING THE RIGHT PLATFORM TO COLLECT GOOD DATA
AND USING AVAILABLE ANALYTIC TOOLS TO TELL THE STORY**



DATA COLLECTION VIA SUBMISSION FORMS

B-Engaged Form → *.CSV FILE

Fields:

- Id Number
- Last Name, First Name
- SUBMISSION_DATE (e.g., 8/14/2020 5:01:44 PM)
- Q: "Will this order provide assistance to a child in your household?"
- Appx. 15 food categories (e.g., Frozen Meals, Dairy/Eggs)
- Pick-up Time
- Etc., etc., etc.

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IMPORTING RAW DATA INTO SAS® ENTERPRISE GUIDE

File → Import Data

WEEK	id	full_name	submission_date	PROCESSED Meats (plus 2 Toats)	Fresh Produce (choose 2 per person)
WEEK1	123	...	...	...	...
	345	...	...	...	...
WEEK2	123	...	...	...	...
	678	...	...	...	...
WEEK3	123	...	...	...	...
	345	...	...	...	...

Task → Data → Append Table
→ Add Table → [Select] → Run

August 14, 2020 to December 17, 2020

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USING THE APPEND TABLE TASK TO COMBINE MULTIPLE *.CSV FILES

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CREATING COMPUTED COLUMNS TO PARSE THROUGH TIME-SERIES DATA

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WRITING AN EXPRESSION WITH A FUNCTION TO CREATE COMPUTED COLUMNS

[Query Builder] → Computed Columns → New → Advanced Expression → <Expression> → Next

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CREATING A COMPUTED COLUMN TO EVALUATE THE DAY OF THE WEEK

COMPUTED COLUMN

```
WEEKDAY
COMPRESS(PUT((DATEPART(L1.DATETIME)), weekday9), 's')
```

WEEKOF

```
CASE
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 1 THEN (INTNX'day', (DATEPART(L1.DATETIME)), 1)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 2 THEN (DATEPART(L1.DATETIME))
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 3 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -1)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 4 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -2)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 5 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -3)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 6 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -4)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 7 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -5)
END
```

OUTPUT

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday

MM/DD/YY
* Mondays only

1	Sunday
2	Monday
3	Tuesday
4	Wednesday
5	Thursday
6	Friday
7	Saturday

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USING THE INTNX FUNCTION TO DETERMINE BOUNDARIES FOR MULTI-DAY INTERVALS

COMPUTED COLUMN

```
WKBRKDOWN
CASE WHEN L1.WEEKDAY = 'Friday' and L1.TIME >= '17:00:00' THEN
```

```
(CASE
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 1 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -2)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 2 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -3)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 3 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -4)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 4 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -5)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 5 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -6)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 6 THEN (DATEPART(L1.DATETIME))
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 7 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -1)
END) ELSE
(CASE
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 1 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -2)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 2 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -3)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 3 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -4)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 4 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -5)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 5 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -6)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 6 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -7)
  WHEN (WEEKDAY(DATEPART(L1.datetime))) = 7 THEN (INTNX'day', (DATEPART(L1.DATETIME)), -1)
END)
END
```

OUTPUT

MM/DD/YY
* Fridays only

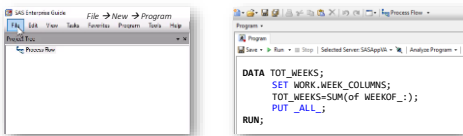
DATEIME	WEEKDAY	TIME	WKBRKDOWN
10/2/2020 17:04	Friday	5:04 PM	10/2/2020
10/3/2020 1:58	Saturday	1:58 AM	10/2/2020
10/4/2020 0:18	Sunday	12:18 AM	10/2/2020
10/5/2020 10:06	Monday	10:06 AM	10/2/2020
10/6/2020 9:19	Tuesday	9:19 AM	10/2/2020
10/7/2020 3:44	Wednesday	3:44 AM	10/2/2020
10/8/2020 12:06	Thursday	12:06 PM	10/2/2020
10/9/2020 4:55	Friday	4:55 PM	10/2/2020
10/10/2020 19:00	Saturday	5:50 PM	10/9/2020

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WRITING CODE IN SAS® ENTERPRISE GUIDE TO QUANTIFY TOTAL WEEKS PER STUDENT



id	full_name	Source	WEEKOF_09/25/20	WEEKOF_09/29/20	WEEKOF_10/02/20	TOT_WEEKS
123	---	COUNT_of_ID_NUMBER	1	1	1	3
345	---	COUNT_of_ID_NUMBER			1	1
678	---	COUNT_of_ID_NUMBER	1			1
910	---	COUNT_of_ID_NUMBER	1	1		2

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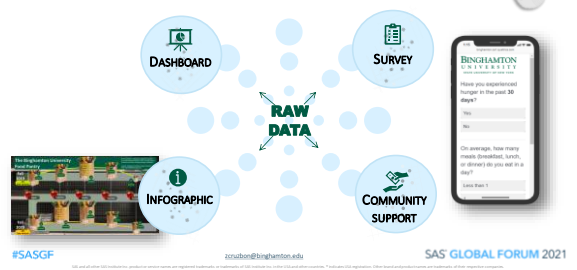
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**USING SAS® VISUAL ANALYTICS TO
CREATE THE PROFILE OF A FOOD PANTRY USER**



**HARNESSING RAW DATA FROM SUBMISSION FORMS TO
GAUGE FOOD INSECURITY AMONG COLLEGE STUDENTS**



Thank you!
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Harnessing raw data from submission forms to gauge food insecurity among college students



References

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