

## SAS: Lab 3

### Using SAS Functions to Create Variables:

Write a data step that reads orion.sales to create work.employees.

- In the data step, create a new variable, **FullName**. This variable is the combination of **First\_Name**, a space, and **Last\_Name**.
- Create a new variable, **Yrs2019**. This variable is the number of years between January 1, 2019, and **Hire\_Date**.
- Format **Hire\_Date** to appear in the form 31/01/2019.
- Give **Yrs2019** a label of **Years of Employment as of 2019**.
- Display only the variables: FullName, Hire\_Date, and Yrs2019.
- Sort the data by descending Yrs2019.

Question 1. What is the value of Yrs2019 for observation 10?

Question 2. What is the file size (in bytes) for the data set work.employees?

### Creating User-Defined Formats:

Using the data set **orion.nonsales**:

- Create a character format named \$GENDER that displays gender codes as follows:

F	Female
M	Male
Any other value	Invalid code

- Create a numeric format named SALRANGE that displays salary ranges as follows:

At least 20,000 but less than 100,000	Below \$100,000
At least 100,000 and up to 500,000	\$100,000 or more
missing	Missing salary
Any other value	Invalid salary

- Using PROC FREQ, run a two-way tabulation report of the variables Salary and Gender.

Question 3. How many Female employees earn salaries below \$100,000?

Question 4. How many Male employees earn salaries above \$100,000?