Programming Assignment, show your code as well as a partial screenshot of your output.

<u>General Knowledge Questions</u>

① due-date = MDY (m, d, r) ② due-date = D m r' d;

1. Write 2 statements each of which assign the SAS date value corresponding to <u>June 28th, 2022</u> to the variable 'due_date'.
2. Which statement, in the PRINT procedure, is used to specify the variable used to create page breaks? PAGEBY
3. Name four different input styles. Column input, list input, formatted input, named input
4. Which statement is used in the DATASETS procedure to change the name of a variable? Rename
5. Which statements can be used to control the variables being written to the output data set? keep/drop
6. List the two symbols used for line pointer control. # /
7. In which step(s) can IF statements be used? Data step
8. Which statement is used in the DATA step to direct SAS to read from an existing SAS dataset? SET
9. Name the function that is used to convert all letters in a string to lowercase. LOWCASE
10. Which input style is used to read in data that has a variable name assigned to each value? named input
11. Which statement is used to direct SAS to raw data within the program? Datalines
12. Which statement is used in the DATASETS procedure to change the format of a variable? format
13. Without the use of DO and END statements, how many executable statements are allowed in an IF-THEN or ELSE statement? one
14. Which procedure can be used to display the data portion of a SAS data set? Print Procedure
15. In the DATA step, can a WHERE statement be used when evaluating a calculated variable? NO

Obs	Student_Group	2019_2020_GradRate	2020_2021_GradRate	PctPtDiff_GradRates
1	African American	76.80%	72.50%	-4.3
2	American Indian or Alaska Native	75.80%	73.00%	-2.8
3	Asian	92.50%	94.10%	1.6
4	Filipino	92.30%	93.80%	1.5
5	Hispanic or Latino	82.10%	80.50%	-1.6
6	Pacific Islander	84.30%	81.70%	-2.6
7	White	87.80%	88.20%	0.4
8	Two or More Races	85.50%	85.50%	0
9	Race/Ethnicity Not Reported	53.90%	72.80%	18.9
10	English Learners	69.00%	67.10%	-1.9
11	Foster Youth	58.00%	55.70%	-2.3
12	Homeless Youth	69.60%	67.80%	-1.8
13	Migrant Education	81.50%	79.40%	-2.1
14	Socioeconomically Disadvantaged	81.20%	80.40%	-0.8
15	Students with Disabilities	68.00%	68.60%	0.6
16	Statewide Total*	84.20%	83.60%	-0.6

	Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat	Label
2	2019_2020_GradRate	Num	8	PERCENT12.2		2019_2020_GradRate
3	2020_2021_GradRate	Num	8	PERCENT12.2		2020_2021_GradRate
4	PctPtDiff_GradRates	Num	8	BEST.		PctPtDiff_GradRates
1	Student_Group	Char	32	$32.	$32.	Student_Group

Q2

Military Branch	Military Branch	State Abbreviation	City	Airport Name
Naval	Naval	AL	Foley	Barin Naval Outlying Field
	Naval	AL	Summerdale	Summerdale Naval Outlying Field
	Naval	CA	Alameda	Alameda Naval Air Station (Nimitz Field)
	Naval	CA	El Centro	El Centro Naval Air Facility
	Naval	CA	Lemoore	Lemoore Naval Air Station (Reeves Field)
	Naval	CA	Mountain View	Moffett Field Naval Air Station
	Naval	FL	Harold	Harold Naval Outlying Field
	Naval	FL	Jacksonville	Whitehouse Naval Outlying Field
	Naval	FL	Jacksonville	Cecil Field Naval Air Station
	Naval	FL	Mayport	Mayport Naval Air Station
	Naval	FL	Milton	Choctaw Naval Outlying Field
	Naval	FL	Milton	Whiting Field Navalk Air Station-North
	Naval	FL	Pensacola	Ellyson Naval Air Station
	Naval	FL	Pensacola	Saufley Field Naval Outlying Field
	Naval	GA	Albany	Albany Naval Air Station
	Naval	GA	Brunswick	Glynco Naval Air Station
	Naval	GA	Marietta	Atlanta Naval Air Station
	Naval	IL	Glenview	Glenview Naval Air Station
	Naval	ME	Brunswick	Brunswick Naval Air Station
	Naval	MI	Mount Clemens	Detroit Naval Air Facility

	Military Branch	State Abbreviation	City	Airport Name
	Marine	MI	Marine City	Marine City Airport
	Marine	NY	New York	Marine Air Terminal
N = 4				

Military Branch	Military Branch	State Abbreviation	City	Airport Name
Army	Army	AK	Delta Junction/Fort	Allen Army Air Field
	Army	AL	Fort Rucker (Ozark)	Cairns Army Air Field
	Army	AL	Fort Rucker/Ozark	Hanchey Army Heliport
	Army	AL	Fort Rucker/Ozark	Lowe Army Heliport
	Army	AL	Fort Zucker/Ozark	Knox Army Heliport
	Army	AR	Fort Chaffee	Chaffee Army Air Field
	Army	AZ	Yuma Proving Ground	Laguna Army Air Field
	Army	CA	Camp Roberts (San Mi	Roberts Army Air Field
	Army	CA	Fort Hunter/Liggett/	Tusi Army Heliport
	Army	CA	Herlong	Amedee Army Air Field
	Army	CA	Sharpe Army Depot (L	Sharpe Army Air Field
	Army	DC	Washington	Pentagon Army Heliport
	Army	GA	Columbus	McKenna Army Air Field
	Army	GA	Fort Benning (Columb	Lawson Army Air Field

Q3

Payroll

EmpID	Salary	NetPay
E00525	$72,000	$56,160
E02466	$41,000	$31,980
E00802	$81,000	$63,180
E00565	$83,000	$64,740
E01457	$36,000	$31,680
E04296	$65,000	$50,700
E03631	$35,000	$30,800
E04219	$38,000	$33,440
E01146	$28,000	$24,640

Q4

	Salary statment	
Last Name	**Day of the Week Hired**	**Bonus**
BEAUMONT	7	$10,800.00
BERGAMASCO	1	$6,150.00
BETHEA	5	$12,150.00
BJURSTROM	4	$12,450.00
BONDS	5	$5,400.00
CHANG	1	$9,750.00
CHOPRA	4	$5,250.00
CHRISTENSEN	5	$5,700.00
CHRISTIAN	6	$4,200.00
CIAMPA	6	$6,600.00
CLAYTON	1	$5,550.00
DIELEMAN	7	$16,200.00
DOWELL	4	$10,650.00
DOWTY	3	$16,800.00

Q5

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                            CarAccidents Report                              1
                                         Tuesday, June 28, 2022 06:01:28 PM

                                                          n         n
    Obs     Reference       Day      Time    Weather    Vehicles  Casualties

     1      1112091     01/01/2014    1840       2          2          1
     2      1180869     01/08/2014    1430       1          3          2
     3      1180869     01/08/2014    1430       1          3          2
     4      11A0238     01/10/2014     817       1          3          2
     5      11A0238     01/10/2014     817       1          3          2
     6      11A0628     01/10/2014    1220       1          2          1
     7      11S1208     01/28/2014    1828       2          3          1
     8      1211556     01/28/2014    2000       1          1          1
     9      1221002     02/02/2014    1531       1          1          1
    10      1270266     02/07/2014     824       1          4          2
    11      1270266     02/07/2014     824       1          4          2
    12      12F1262     02/25/2014    1800       2          2          1
    13      12H1186     02/17/2014    1728       2          1          1
    14      12H1210     02/17/2014    1735       1          2          1
    15      12H1381     02/17/2014    1905       2          2          1
    16      12I0039     02/18/2014      46       1          1          1
    17      12I0740     02/18/2014    1320       1          2          1
    18      12I0834     02/18/2014    1422       1          1          1
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Q6A

	Alphabetic List of Variables and Attributes			
#	**Variable**	**Type**	**Len**	**Label**
2	Day	Num	8	Date of Accident
1	Reference	Char	7	Reference Number
3	Time	Num	8	
4	Weather	Num	8	Weather Condition
6	nCasualties	Num	8	Number of Casualties
5	nVehicles	Num	8	Number of Vehicles

Q6B

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Format	Label
2	Day	Num	8	DATE9.	Date of Accident
1	Reference	Char	7		Reference ID
3	Time	Num	8		
4	Weather	Num	8		Weather Condition
6	nCasualties	Num	8		Number of Casualties
5	nVehicles	Num	8		Number of Vehicles

7

Alphabetic List of Variables and Attributes

#	Variable	Type	Len
2	Day	Char	10
1	Reference	Char	7
4	Severity	Num	8
3	Time	Num	8
6	VehicleType	Num	8
5	nVehicles	Num	8

Car Accident Data

Obs	Reference	Day	Time	Severity	nVehicles	VehicleType
1	1112091	01/01/2014	1840	3	2	9
2	1180869	01/08/2014	1430	3	3	9
3	1180869	01/08/2014	1430	3	3	9
4	11A0238	01/10/2014	817	3	3	9
5	11A0238	01/10/2014	817	3	3	9
6	11A0628	01/10/2014	1220	3	2	9

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                   Car Accident Data              Tuesday, June 28, 2022 06:03:36 PM

                                                 n          Vehicle
     Obs     Reference       Day       Time    Severity   Vehicles     Type

       1      1112091     01/01/2014    1840       3          2          9
       2      1180869     01/08/2014    1430       3          3          9
       3      1180869     01/08/2014    1430       3          3          9
       4      11A0238     01/10/2014     817       3          3          9
       5      11A0238     01/10/2014     817       3          3          9
       6      11A0628     01/10/2014    1220       3          2          9
       7      11S1208     01/28/2014    1828       3          3          9
       8      1211556     01/28/2014    2000       3          1          9
       9      1221002     02/02/2014    1531       3          1          9
      10      1270266     02/07/2014     824       3          4          9
      11      1270266     02/07/2014     824       3          4          9
      12      12F1262     02/25/2014    1800       3          2          1
      13      12H1186     02/17/2014    1728       3          1          9
      14      12H1210     02/17/2014    1735       3          2         11
      15      12H1381     02/17/2014    1905       3          2          9
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