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| **Name: Ayush Patel**  **Roll: A232**  **Semester: VII**  **Class: Btech 4th year**  **Branch: IT** |
| **Practical-1 Part A** |
| **Aim:** Write a SAS Program to performed following task   1. Program to create SAS dataset Employee and Company with following information.   Employee Dataset   * EmployeeID * Fname * Lname * Gender * Salary   Company Dataset   * Company Name * Country * CMM Level * Number of Headquarters  1. Write Proc print step to display the above datasets create. 2. Program to examine SAS datasets and SAS Library. Modify the proc step with option to control the display of descriptor portion. 3. Access stock dataset from SASHELP library and performed following task.  * Write SAS program to display following variables in SAS Report  1. Stock name 2. Open price 3. Date 4. Volume  * Customized above report to find total of open price of stock. * Design report for stock dataset with help of following operator  1. In operator 2. Like operator to include observation of stock containing word “soft” 3. Contains operator 4. NULL opearator 5. Design report in SAS to subset the all the observation having stock date less the 02NOV88. 6. Design a report to subset the observation having stock name IBM and Microsoft. 7. Write proc step to examine the dataset stock,Air,Cars and display their descriptor information. 8. Write proc step to examine the SAS HELP library with option to suppress the descriptor portion. |
| **Prerequisite:** Programming for Problem Solving |
| **Outcome:**To create dataset and performed data analysis and examine SAS Datasets and Library |
| Theory: |
| **Procedure:**   1. Open SAS Studio and write the SAS program |
| **Instructions:**   1. Write source code of all stored procedure 2. Copy code & paste in code section of Part B. |
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| **Part B** |
| **Code:**  **a)**  data Employee;  input Empid Fname $ Lname $ Gender $ Salary;  datalines;  1 Ayush Patel Male 50000  2 Sergino Dest Male 60000  3 Pedri Gonzalez Male .  ;  data Company;  input Compname $ Country $ CMM\_Lvl $ No\_of\_HQ;  datalines;  Microsoft USA 5 600  Intel UK 5 200  Apple USA 6 550  ;  **b)**  proc print data = Employee;  run;  proc print data = Company;  run;  **c)**  proc contents data = sashelp.\_all\_;  run;  proc contents data = sashelp.\_all\_ nods;  run;  **d)**  proc print data = sashelp.stocks;  var stock date open volume;  run;  proc print data = sashelp.stocks;  var stock date open volume;  sum open;  run;  proc print data = sashelp.stocks;  var stock date open volume;  where stock in ('Microsoft','IBM');  run;  proc print data = sashelp.stocks;  var stock date open volume;  where stock like '%soft';  run;  proc print data = sashelp.stocks;  var stock date open volume;  where stock contains 'M';  run;  proc print data = employee;  where Salary is NULL;  run;  **e)**  proc print data = sashelp.stocks;  where date<='02NOV88'd;  run;  **f)**  proc print data = sashelp.stocks;  var stock date open volume;  where stock in ('Microsoft','IBM');  run;  **g)**  proc contents data = sashelp.stocks;  run;  proc contents data = sashelp.air;  run;  proc contents data = sashelp.cars;  run;  **h)**  proc contents data = sashelp.stocks nods;  run; |
| **Output:**   1. **& b) Snapshot of the sample data set**      1. **Snapshot of sas library with the descriptor portion**      1. **Snapshot of dataset where stock name, open, date and volume is displayed.**     **Snapshot of dataset where sum of open is displayed**    **Snapshot of in operator**    **Snapshot of %soft**    **Snapshot of Contain operator**    **Snapshot of NULL operator**    **e) Snapshot of dataset where date is less than 02NOV88**    **f) Snapshot of data where only stocks having name IBM and Microsoft are printed.**    **g) Snapshots of dataset where descriptor portion of air,stock and car are displayed.**      **h) Snapshot of dataset where the library is displayed with the descriptor portion is suppressed.** |
| **Observation & Learning:**  Learned about the various operators and proc print statements used to modify the sas libraries printed. |
| **Conclusion:**  Executed various commands and operators on the dummy dataset and also on the sashelp.stocks dataset. |
| **Question:**   1. **What is difference between proc print and proc contents**   Proc print displays data whereas proc contents shows metadata about the data.   1. **How to represent missing values in SAS Dataset**   For char – blank  For int – “ . “   1. **List the options used in proc print and proc contents**   Nods, noobs, var, where, sum, etc.   1. **Which statement is used to create library. Is it global statement.**   Libname is used to create a library in SAS Studio. Yes, it is a global statement |