

Babu Madhav Institute of Information Technology, UTU		
5 years Integrated M.Sc. (IT) / B.Sc. (IT) (5 <sup>th</sup> Semester)		
Subject: IT5013 - Introduction to Data Processing with Python Practical Internal - 2 – 2023-24		
Duration: 80 mins		Max. Marks: 20. Date: 18/10/2022
Q-1	<p>Write a python script that loads the “cie.csv” file and do the following:</p> <ol style="list-style-type: none"> <li>Add columns “<b>FOP-1(15), FOP-2(15), FOP-3(20), DBMS-1(15), DBMS-2(15), DBMS-3(20)</b>”. Calculate and store the marks based on the individual CIE marks. <ul style="list-style-type: none"> <li>FOP and DBMS – CIE – 1 (30) convert into 15 marks.</li> <li>FOP and DBMS – CIE – 2 (30) convert into 15 marks.</li> <li>FOP and DBMS – CIE – 3 (30) convert into 20 marks.</li> </ul> </li> <li>Add columns “<b>FOP Total, DBMS Total</b>”. Calculate and store total marks into each column based on following: <ul style="list-style-type: none"> <li>FOP Total = FOP-1(15) + FOP-2(15) + FOP-3(20)</li> <li>DBMS Total = DBMS-1(15) + DBMS-2(15) + DBMS-3(20)</li> </ul> </li> <li>Add the “<b>Percentage</b>” column, which stores the percentage based on two subject total marks.</li> <li>Print the names of the student who secured the 1<sup>st</sup> Rank based on percentage.</li> <li>Add the “<b>Result Class</b>” column, which stores the result of the student. The result will be considered based on the given criteria: <ul style="list-style-type: none"> <li>If the student scores less than 50 marks in any subject or the percentage is less than 50, store the result “FAIL”.</li> <li>If the percentage is between 50 to 60, then store result “SECOND”.</li> <li>If the percentage is between 60 to 70, then store result “FIRST”.</li> <li>If the percentage is greater than 70, then store result “DISTINCTION”.</li> </ul> </li> <li>Display a bar chart by grouping the classes given in “Result Class” column.</li> <li>Store the updated csv file as result.csv.</li> </ol> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>cie.csv file contains the practical cie marks for FOP and DBMS subjects.</li> <li>For each subject total three CIE exams are considered. Each CIE exam is of 30 marks.</li> <li>The passing criteria in CIE are 50% of marks.</li> <li>The total maximum marks for each subject is 50 and it is calculated based on (15 + 15 + 20 = 50).</li> </ul> <p><b>Question wise marks: 4 + 3 + 3 + 3 + 3 + 3 + 1 = 20</b></p>	20
Q-2	Viva & Journal.	

