

## Academic Tasks (22231)

**Academic Task Number: 2****Course code:** CAP447 (Section D2215 – G1)**Date of allotment:** 14.10.2022**Course title:** Data Warehousing and data mining Laboratory**Date of submission:** 14.10.2022**Maximum Marks:** 50**Academic Task Type:** Practical

Question Number	Question Statement	Course Outcome	Bloom's level	Marks per Question
Q1 (SET 1)	<p><b>Here we are looking to find the missing values and replace the missing values</b></p> <p><b>Dataset: Mushroom Dataset</b></p> <p><b>To do the following on the dataset:</b></p> <ul style="list-style-type: none"> <li>a) Import the dataset using operator</li> <li>b) Analyze the dataset (instances, attributes)</li> <li>c) Show the missing attributes from the dataset using operator</li> <li>d) Show the no missing attributes from the dataset using operator</li> </ul>	CO1	L1: Remember	15

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	<ul style="list-style-type: none"> <li>e) Replace the single attribute missing value (<b>Cap-surface</b>) using mean function</li> <li>f) Replace the all the missing values using mean function</li> <li>g) Rename any attribute using operator</li> <li>h) Select the following attributes only from the dataset (cap-diameter, cap-shape, cap-surface, cap-color)</li> <li>i) Change the role of class attribute into prediction role</li> <li>j) Remove duplicate values from class attribute</li> <li>k) Apply min-max normalization on single, subset and all attributes</li> <li>l) Apply sampling preprocessing (use only absolute and probability)</li> </ul>			
<b>Q2</b>  <b>(SET 1)</b>	<b>Dataset: Titanic</b>  <b>Link: Internal dataset</b>  <ul style="list-style-type: none"> <li>a) Analyze the dataset (instances, attributes)</li> <li>b) Show the missing attributes from the dataset using</li> </ul>		L3:	

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	operator	CO2	Apply	15
	<ul style="list-style-type: none"> <li>c) Replace the single attribute missing value (<b>Age</b>) using mean function</li> <li>d) Replace the all the missing values using max function</li> <li>e) Rename the <b>Age</b> attribute into <b>Passenger Age</b></li> <li>f) Select the following attributes only from the dataset (Age, Cabin, Passenger fare and Life Boat)</li> <li>g) Use replacement functions for each column (use column entry)</li> <li>h) Change the role of Passenger class attribute into prediction role</li> <li>i) Apply min-max normalization (min:1; max: 10) on single, subset and all attribute</li> <li>j) Remove duplicate values from Passenger class attribute</li> <li>k) Sort the single attribute values (Ascending)</li> <li>l) Apply sampling preprocessing (use only absolute and probability)</li> </ul>			

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	m)			
<b>Q1 (SET 2)</b>	<p><b>Dataset: Global superstore 2017</b></p> <p><b>Link: LPULive (Already shared)</b></p> <ul style="list-style-type: none"> <li>a) import the dataset using operator</li> <li>b) Analyze the dataset (instances, attributes)</li> <li>c) Show the missing attributes from the dataset using operator</li> <li>d) Show the no missing attributes from the dataset using operator</li> <li>e) Replace the missing value using mean function</li> <li>f) Rename the <b>Region</b> attribute into <b>decision class</b></li> <li>g) Select the following attributes only from the dataset (Market, Region, Category and Product name)</li> <li>h) Change the role of decision class attribute into prediction role</li> </ul>	CO3	L6:Create	15

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	<ul style="list-style-type: none"> <li>i) Apply min-max normalization on single attribute, subset and all</li> <li>j) Sort the single attribute values (Descending order)</li> <li>k) Apply sampling preprocessing (use only absolute and probability)</li> <li>l) Visualize the dataset</li> </ul>			
<b>Q2</b> <b>(SET 2)</b>	<b>Dataset: melb_data</b> <ul style="list-style-type: none"> <li>a) import the dataset using operator</li> <li>b) Show the missing attributes from the dataset using operator</li> <li>c) Show the no missing attributes from the dataset using operator</li> <li>d) Replace the single attribute missing value (<b>BuildingArea</b>) using mean function</li> <li>e) Replace only any two attribute missing values using min function</li> </ul>			15

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	<p>f) Replace the all the missing values using max function</p> <p>g) Rename the <b>BuildingArea</b> attribute into <b>AreaBuilding</b></p> <p>h) Select the following attributes only from the dataset (BuildingArea, YearBuilt and CouncilArea)</p> <p>i) Change the role of Building Area attribute into prediction role</p> <p>j) Apply min-max normalization on single, subset and all attribute</p> <p>k) Remove duplicate values from AreaBuilding attribute</p> <p>l) Apply sampling preprocessing (use only absolute and probability)</p>			
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