L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

Note : This question bank is only for reference purpose. LJU Test question paper may not be completely set from this question bank.

unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
1	1	Which of the following functions can be used to fill all null values in a data frame?	A	1	fillna()	filled()	fillnull()	filler()
1	2	Which attribute of dropna() can be used to select the columns from which null values are to be considered for removing rows?	C	1	thresh	how	subset	superset
1	3	Which of the following pandas functions is used to generate cross tabulation?	D	1	crosstabulation	cross_tabulation	cross_tab	crosstab
1	4	Which of the following DataFrame attributes is used to return one or more specified row(s)?	C	1	locate	location	loc	find
1	5	Which of the following attributes can be used to show the number of rows and columns in a Pandas dataframe?	D	1	size	info	describe	shape
1	6	Which of the following is not displayed by the Pandas DataFrame info function?	D	1	column names	non-null count	data types	column average
1	7	Which of the following is not displayed by the Pandas DataFrame describe function?	C	1	count	mean	correlation	std
1	8	What does it indicate if the corr() function shows correlation as 1 between any two columns of the DataFrame?	A	1	perfect correlation	good correlation	bad correlation	none of these
1	9	Which of the following is an example of qualitative data?	B	1	mean	gender	median	mode
1	10	Which of the following is an example of quantitative data?	B	1	eye colour	weight	skin colour	names
1	11	What does DataFrame.dropna(how='all') do?	A	1	drops those rows from the DataFrame which contain all null values	drops all rows from the DataFrame	drops even numbered rows from the DataFrame	drops odd numbered rows from the DataFrame
1	12	A data point that differs significantly from other observations is known as	D	1	mean	median	mode	outlier
1	13	Which of following pandas functions can be used to display the specified number of rows from the beginning of the dataset?	A	1	head()	tail()	begin()	end()
1	14	Which of following pandas functions can be used to display the specified number of rows from the end of the dataset?	B	1	head()	tail()	begin()	end()
1	15	Which of the following represents each data sample as polyline connecting parallel lines where each parallel line represents an attribute of that data sample?	A	1	parallel coordinates	parallelogram	straight lines	long lines
1	16	Create a Pandas DataFrame from the following table and write code to remove all rows from this table containing at least one NaN value name / region / sales / expenses 0 William NaN 50000.0 42000.0 1 Emma North 52000.0 43000.0 2 Sofia East NaN NaN 3 Markus NaN NaN NaN 4 Edward West 42000.0 38000.0 5 Thomas West 72000.0 39000.0 6 Ethan South 49000.0 42000.0 7 NaN NaN NaN NaN 8 Arun West 67000.0 39000.0 9 Anika East 65000.0 50000.0 10 Paulo South 67000.0 45000.0		3				
		Create a Pandas DataFrame from the following table and write code to remove all rows from this table only if all of their values are NaN						

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1	17	<table><tr><th></th><th>name</th><th>region</th><th>sales</th><th>expenses</th></tr><tr><td>0</td><td>William</td><td>NaN</td><td>50000.0</td><td>42000.0</td></tr><tr><td>1</td><td>Emma</td><td>North</td><td>52000.0</td><td>43000.0</td></tr><tr><td>2</td><td>Sofia</td><td>East</td><td>NaN</td><td>NaN</td></tr><tr><td>3</td><td>Markus</td><td>NaN</td><td>NaN</td><td>NaN</td></tr><tr><td>4</td><td>Edward</td><td>West</td><td>42000.0</td><td>38000.0</td></tr><tr><td>5</td><td>Thomas</td><td>West</td><td>72000.0</td><td>39000.0</td></tr><tr><td>6</td><td>Ethan</td><td>South</td><td>49000.0</td><td>42000.0</td></tr><tr><td>7</td><td>NaN</td><td>NaN</td><td>NaN</td><td>NaN</td></tr><tr><td>8</td><td>Arun</td><td>West</td><td>67000.0</td><td>39000.0</td></tr><tr><td>9</td><td>Anika</td><td>East</td><td>65000.0</td><td>50000.0</td></tr><tr><td>10</td><td>Paulo</td><td>South</td><td>67000.0</td><td>45000.0</td></tr></table>		3				
1	18	Create a Pandas DataFrame from the following table and write code to drop all columns containing NaN <table><tr><th></th><th>name</th><th>region</th><th>sales</th><th>expenses</th></tr><tr><td>0</td><td>William</td><td>NaN</td><td>50000.0</td><td>42000.0</td></tr><tr><td>1</td><td>Emma</td><td>North</td><td>52000.0</td><td>43000.0</td></tr><tr><td>2</td><td>Sofia</td><td>East</td><td>NaN</td><td>NaN</td></tr><tr><td>3</td><td>Markus</td><td>NaN</td><td>NaN</td><td>NaN</td></tr><tr><td>4</td><td>Edward</td><td>West</td><td>42000.0</td><td>38000.0</td></tr><tr><td>5</td><td>Thomas</td><td>West</td><td>72000.0</td><td>39000.0</td></tr><tr><td>6</td><td>Ethan</td><td>South</td><td>49000.0</td><td>42000.0</td></tr><tr><td>7</td><td>NaN</td><td>NaN</td><td>NaN</td><td>NaN</td></tr><tr><td>8</td><td>Arun</td><td>West</td><td>67000.0</td><td>39000.0</td></tr><tr><td>9</td><td>Anika</td><td>East</td><td>65000.0</td><td>50000.0</td></tr><tr><td>10</td><td>Paulo</td><td>South</td><td>67000.0</td><td>45000.0</td></tr></table>		3				
1	19	Write Python code to remove outliers from a given DataFrame		4				

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1	20	Consider the following data:
		data = {
		"A": ["TeamA", "TeamB", "TeamB", "TeamC", "TeamA"],
		"B": [50, 40, 40, 30, 50],
		"C": [True, False, False, False, True]
		}
		
		Convert this to a Pandas DataFrame and remove duplicate rows from it. Reset index values.
				4				

1	21	Consider the following autompg dataset: https://raw.githubusercontent.com/Jovita7/Data-Analysis-and-Visualization/main/auto-mpg.csv Write Python code to convert it to a DataFrame and remove mpg and cylinders columns from it		3				
1	22	Explain the difference between a Pandas Series and a Pandas DataFrame with an example code		5				
1	23	Explain the DataFrame describe function along with parameters include, exclude and percentiles with code		4				
1	24	Use the file heights_weights.csv (https://raw.githubusercontent.com/Jovita7/Data-Analysis-and-Visualization/main/heights_weights.csv) which contains 10000 non-null values for heights and weights. The Male column shows 1 if the person is a Male and 0 if the person is a Female. 1. Convert this file into a pandas Data Frame. (0.5 marks) 2. Display basic information like memory and data types for this data frame. (0.5 marks) 3. Display basic statistics like mean, std, quartiles, etc. for this data frame. (0.5 marks) 4. Create a correlation table for the data frame and comment about what kind of correlation is there between Height and Weight. (0.5 marks) 5. Do Height and Weight contain any outliers? (1 mark)		3				
1	25	What are outliers? Write a python code to find outliers from a given column in a DataFrame.		3				
2	1	Which of the following commands is used to create an area plot in Matplotlib?	C	1	plt.scatter()	plt.area()	plt.fill_between()	plt.plot()
2	2	Which of the following statements is true about an area plot?	A	1	It is used to show the trend of a continuous variable over time.	It is used to compare the distribution of two or more variables.	It is used to display the relationship between two or more categorical variables.	It is used to visualize the distribution of a single variable.
2	3	Which of the following is not a visualization under matplotlib?	D	1	Scatter Plot	Area Plot	Box Plot	Table Plot
2	4	Which python package is used for data visualization?	A	1	matplotlib.pyplot	matplotlib.pip	matplotlib.numpy	matplotlib.plt
2	5	Which of the following commands is used to show a Matplotlib plot in a Jupyter notebook?	C	1	plt.plot()	plt.display()	plt.show()	plt.draw()
2	6	Plot which is used to give statistical summary is	B	1	Scatter Plot	Box Plots	Bar Plot	Area Plot
2	7	Which of the following chart element is used to identify data series by its color patterns?	B	1	Data Series	Legend	Title	Markers
2	8	Which of the following is incorrect regarding Data Visualization?	B	1	Data visualization can be done using Matplotlib library in python	Visualizing large and complex data does not produce effective results	Data visualization is immensely useful in data analysis	Decision makers use data visualization to understand business problems easily and build strategies
2	9	Which statement is not true about scatter chart?	C	1	Also known as correlation chart	It is primarily used to represent relation between two sets of data	The closer the dots to line, the weaker the relation will be	It uses dots to represent data points

L.J Institute of Engineering and Technology, Ahmedabad.
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2	10	Which of the following is best suitable chart to show data correlation?	D	1	Histogram	Bar	Pie	Scatter
2	11	Whf the following parameters is used to specify the transparency of an area plot in Matplotlib?	A	1	alpha	linewidth	color	label
2	12	Which of the function in matplotlib is used to draw a special attention to the points of interest on a chart?	A	1	plt.annotate( )	plt.label()	plt.title()	plt.tag()
2	13	Which of the following commands is used to create a stacked area plot in Matplotlib?	B	1	plt.plot()	plt.stackplot ()	plt.fill_betw een()	plt.area()
2	14	What type of data is best suited for box plots?	C	1	Categorical data	Binary data	Continuous numerical data	Time-series data
2	15	What is the name of the line that divides the box in a box plot?	A	1	Median	Mean	Mode	Standard deviation
2	16	Which of the following is not included in a box plot?	B	1	Median	Mode	Interquartile range	Whiskers
2	17	In a box plot, the bottom line of the box represents which quartile?	A	1	First quartile	Second quartile	Third quartile	Fourth quartile
2	18	In a box plot, the top line of the box represents which quartile?	C	1	First quartile	Second quartile	Third quartile	Fourth quartile
2	19	Which of the following statements about outliers in a box plot is true?	B	1	Outliers are always errors and should be removed from the data.	Outliers are values that fall outside the interquartile range and can indicate extreme values or errors.	Outliers are always part of the data and should always be included in the analysis	Outliers are only found in categorical data.
2	20	What do the whiskers in a box plot represent?	C	1	The minimum and maximum values in the data	The range of the data	The interquartile range of the data	The standard deviation of the data
2	21	Which of the following statements about box plots is true?	B	1	Box plots can only be used for numerical data.	Box plots show the distribution of the data, including outliers.	Box plots can only be used for data with a normal distribution.	Box plots are not useful for comparing the distribution of multiple datasets.
2	22	Which of the following statements about the interquartile range (IQR) is true?	C	1	The IQR is calculated by subtracting the minimum value from the maximum value.	The IQR is calculated by dividing the range by the sample size.	The IQR is a measure of the spread of the middle 50% of the data.	The IQR is a measure of the average distance between each data point and the mean.
2	23	What is a waffle chart in Python?	D	1	A type of pie chart	A type of stacked bar chart	A type of heatmap	A type of visualization that displays progress towards a goal

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2	24	In a waffle chart, what does each square (or "waffle") typically represent?	A	1	A percentage of the total	A count of some variable	A categorical label	None of the above
2	25	In a waffle chart, what is the recommended maximum number of squares (or "waffles") to use?	D	1	50	100	500	There is no recommended maximum, it depends on the data and context.
2	26	Which of the statement is true for Word Clouds?	A	1	A graphical representation of the most frequently occurring words in a text corpus	A cloud computing service for analyzing text data	A machine learning algorithm for text classification	A programming language for natural language processing
2	27	Which of the following types of data is best suited for creating a word cloud?	C	1	Categorical data	Numerical data	Text data	Image data
2	28	Which of the following parameters in the WordCloud() function is used to set the maximum number of words in the cloud?	A	1	max_words	words	max	word_size
2	29	Which of the following methods in the WordCloud() function is used to generate the word cloud image?	A	1	generate()	fit()	transform()	predict()
2	30	What does STOPWORDS contain in wordcloud?	A	1	Words that are used very frequently in a language and have little meaning, such as "the", "is", and "and"	Words that are used very rarely in a language and have little meaning, such as "zephyr", "ebullient", and "myriad"	Words that are used in a specific domain, such as "computer", "internet", and "programming"	Words that are used in formal contexts, such as "therefore", "moreover", and "thus"
2	31	What is the purpose of removing stopwords from a text before generating a word cloud?	C	1	To improve the readability of the word cloud	To reduce the number of words in the word cloud	To remove words that have little meaning and contribute to noise in the visualization	To highlight the most important words in the word cloud
2	32	Which Python library is commonly used to create regression plots?	B	1	Pandas	Seaborn	Matplotlib	NumPy
2	33	Which type of regression plot is used to visualize the relationship between two continuous variables?	B	1	Implot	regplot	residplot	jointplot
2	34	What is the purpose of the scatter_kws parameter in the sns.regplot() function?	D	1	To specify the size of the data points	To adjust the transparency of the data points	To specify the color of the data points	To specify additional keyword arguments for the scatter plot
2	35	What is a heatmap used for?	B	1	To visualize categorical data	To visualize numerical data in a grid-like format	To fit a regression line to the data	To perform clustering on the data
2	36	Which parameter in the sns.heatmap() function is used to show numerical values in heatmap?	A	1	annot	annotate	percent	show

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2	37	Which parameter is used to specify the colormap for the heatmap?	D	1	colormap	palette	color	cmap
2	38	What is the purpose of the cbar parameter in the sns.heatmap() function?	C	1	To adjust the transparency of the colorbar	To adjust the size of the colorbar	To add a colorbar to the heatmap	To adjust the color scale of the heatmap
2	39	Which of the following statements is true about Folium?	B	1	It can be used to create static maps	It can be used to create interactive maps	It can only be used to create maps with markers	It can only be used to create maps with polygons
2	40	Which of the following methods is used to create a map in Folium?	B	1	folium.create_map()	folium.Map()	folium.make_map()	folium.new_map()
2	41	Which of the following methods is used to add a marker to a map in Folium?	D	1	add_marker()	add_point()	add_location()	add_child()
2	42	Which of the following statements is true about the CircleMarker class in Folium?	A	1	It is used to create a circle markers on a map	It is used to create a polygon markers on a map	It is used to add a single marker to a map	It is not a valid class in Folium
2	43	What tile style of Folium maps is usefule for data mashups and exploring river meanders and coastal zones?	B	1	OpenStreet Map	Stamen Toner	Stamen Terrain	River and Coastal
2	44	Which of the following statements is true about the Choropleth class in Folium?	B	1	It is used to create a heatmap	It is used to create a choropleth map	It is used to group markers together	It is not a valid class in Folium
2	45	Which of the following methods is used to add a Choropleth to a map in Folium?	B	1	map.add_choropleth()	Choropleth.add_to(map)	map.add_layer()	Choropleth.add_marker()
2	46	Which of the following methods is used to create a Choropleth map in Folium?	B	1	folium.Map()	folium.Choropleth()	folium.Marker()	folium.Circle()
2	47	Which of the following types of graphs is not supported by NetworkX?	C	1	Directed graphs	Undirected graphs	Hypergraphs	None of the above
2	48	What is a node in a networkX graph?	B	1	A connection between two edges	A point or vertex in a graph	A measure of the strength of a connection between two nodes	A way to measure the centrality of a node
2	49	Which of the following methods is used to create an empty graph in NetworkX?	C	1	empty_graph()	create_graph()	Graph()	empty()
2	50	Which of the following methods is used to add nodes to a graph in NetworkX?	A	1	graph.add_node()	graph.add_nodes()	graph.nodes()	graph.node()
2	51	Which of the following methods is used to visualize a graph in NetworkX?	A	1	nx.draw()	graph.visualize()	graph.draw()	nx.plot()
		Write a function called make_simple_graph that returns the graph object that represents the following diagram:						

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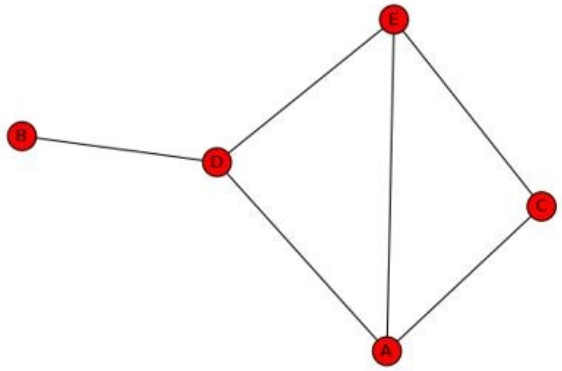
2	52			3				
2	54	Create a boxplot of the distribution of temperatures in different cities. Take data from 'temperatures.csv' from below: https://raw.githubusercontent.com/kavit88/Data-Sets/main/temperatures.csv		3				
2	53	The following dictionary shows how five people follow each other on Instagram: instagram = {'person1': [0,1,1,0,1], 'person2': [0,0,1,0,1], 'person3': [1,1,0,1,1],'person4': [1,1,1,0,0], 'person5': [1,1,0,0,0]} E.g., the list for person1 has the value on index 2 as 1 which means person1 followsperson3 and a directed edge should be added from person1 to person3. Using networkx library, create a directed graph.		4				
2	55	You have been given a dataset of car prices and their respective horsepower, mileage, and weight. You have been tasked to analyze the relationship between these variables and create a scatter plot to visualize the patterns. Dataset: The dataset, named "car_data.csv" : https://raw.githubusercontent.com/kavit88/Data-Sets/main/car_data.csv		5				
2	56	You have been given a dataset of house prices and their respective lot size and square footage. Your task is to create a scatter plot to determine if there is any correlation between these variables. Dataset: The dataset, named "house_data.csv": https://raw.githubusercontent.com/kavit88/Data-Sets/main/house_data.csv		5				

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2	57	Use the file heights_weights.csv which contains 10000 non-null values for heights and weights. The Male column shows 1 if the person is a Male and 0 if the person is a Female. Take file of dataset from: https://raw.githubusercontent.com/kavit88/Data-Sets/main/heights_weights.csv 1. Convert this file into a pandas Data Frame. 2. Display basic information like memory and data types for this data frame. 3. Display basic statistics like mean, std, quartiles, etc. for this data frame. 4. Create a correlation table for the data frame and comment about what kind ofcorrelation is there between Height and Weight. 5. Do Height and Weight contain any outliers? Answer by creating boxplots for both. 6. Finally, create a scatter plot of Weight v/s Height with the following specifications: (i) use + sign, colour green and size 50 for markers. (ii) Label X Axis as Weight and Y Axis as Height. (iii) Display title on top as Weight vs Height		6				
2	58	The file "sales.csv" contains the monthly sales data for a store over a year. Each row contains the month (in the format "yyyy-mm"), the total sales for that month, and the number of items sold. Create a pandas DataFrame from this data and plot the monthly sales using an area plot. Take the dataset from below: https://raw.githubusercontent.com/kavit88/Data-Sets/main/sales.csv		3				
2	59	The file "survey.csv" contains the results of a survey that asks people how many hours they sleep per night, how much coffee they drink per day, and how many hours they spend exercising per week. Create a pandas DataFrame from this data and plot the relationships between these variables using regression plots. Specifically, create the following plots: 1. A regression plot of hours of sleep versus cups of coffee per day, with a regression line and confidence interval. 2. A regression plot of hours of sleep versus hours of exercise per week, with a regression line and confidence interval. 3. A regression plot of cups of coffee per day versus hours of exercise per week, with a regression line and confidence interval. Label each axis appropriately and give each plot a title. Take Dataset from below: https://raw.githubusercontent.com/kavit88/Data-Sets/main/survey.csv		5				
2	60	Create a folium map and add multiple markers using a pandas DataFrame		3				
2	61	Use the California_Houses.csv file to create a map with the first 200 rows using the latitudes and longitudes given in the file with the following customizations: 1. Colour of circle markers should be green with red fill and the type of map should be stamen terrain 2. Add pop up labels using the population from the file. Take the dataset fom below: https://raw.githubusercontent.com/kavit88/Data-Sets/main/California_Houses.csv		4				
2	62	The file "student_scores.csv" contains the marks scored by a group of students in three subjects: Maths, Science, and English. Each row contains the name of the student, their score in Maths, Science, and English. Create a pandas DataFrame from this data and create a heatmap to visualize the correlations between the scores in these three subjects. Take Dataset from below: https://raw.githubusercontent.com/kavit88/Data-Sets/main/student_scores.csv		3				
2	63	You are given a dataset that contains the unemployment rate of different US states for the year 2021. You have to create a choropleth map of the US using the unemployment rate data. csv file: https://raw.githubusercontent.com/Jovita7/Data-Analysis-and-Visualization/main/US_Unemployment_Oct2012.csv json file: https://raw.githubusercontent.com/Jovita7/Data-Analysis-and-Visualization/main/us-states.json		3				
2	64	You are given a text file named "speech.txt" which contains the transcript of a speech. You need to create a Word Cloud for the most frequent words used in the speech. https://raw.githubusercontent.com/kavit88/Data-Sets/main/speech.txt		3				
2	65	You are given a dataset containing customer reviews of a restaurant. Your task is to create a wordcloud of the most frequent words used in the reviews after removing the stopwords. https://raw.githubusercontent.com/kavit88/Data-Sets/main/restaurant_reviews.csv		4				
2	66	Suppose you have data on the number of medals won by a country in the 2020 Tokyo Olympics. You want to visualize this data using a waffle chart to show the proportional representation of each country's medal count. Data={'USA': 113, 'China': 88, 'Japan': 58, 'Great Britain': 65, 'ROC': 71, 'Australia': 46, 'Netherlands': 36, 'France': 33, 'Germany': 37, 'Italy': 40}		3				

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2	67	You have been hired as a network analyst by a company to analyze the social network of their employees. The company has provided you with the following data: There are 5 employees in the company, each identified by a unique ID from 1 to 5. The following relationships exist between the employees: 1. Employee 1 is friends with Employee 2 and Employee 3. 2. Employee 2 is friends with Employee 4. 3. Employee 3 is friends with Employee 5. Your task is to create a NetworkX graph representing this social network and display it.		5				
2	68	You have been hired by a transportation company to analyze their delivery routes. The company has provided you with a matrix representing the adjacency of the cities they deliver to. Each row and column of the matrix represents a city, and the entry (i, j) represents the number of deliveries from city i to city j. Your task is to create a NetworkX directed graph representing the delivery routes and display it. The graph should have a node for each city, and edges should represent delivery routes. The edges should be labeled with the number of deliveries along that route. Matrix = [[0, 2, 3, 0, 1], [0, 0, 1, 4, 0], [0, 0, 0, 1, 2], [0, 0, 0, 2, 3], [0, 0, 0, 0, 0]]		7				
3	1	Which module in Python supports regular expressions?	A	1	re	regex	pyregex	None of these
3	2	What does the function re.search do?	B	1	matches a pattern at the start of the string	matches a pattern at any position in the string	such a function does not exist	Matches a pattern at the end of the string
3	3	What will be the output of the following Python code? re.split('\W+', 'Hello, hello, hello.')	D	1	[‘Hello’, ‘hello’, ‘hello.’]	[‘Hello, ‘hello’, ‘hello’]	[‘Hello’, ‘hello’, ‘hello’, ‘.’]	[‘Hello’, ‘hello’, ‘hello’, ”]
3	4	What will be the output of the following Python function? re.findall("hello world", "hello", 1)	B	1	[“hello”]	[]	hello	hello world
3	5	What will be the output of the following Python code? re.sub('morning', 'evening', 'good morning')	A	1	‘good evening’	‘good’	‘morning’	‘evening’
3	6	What will be the output of the following Python code? re.split('mum', 'mumbai*', 1)	B	1	Error	[”, ‘bai*’]	[”, ‘bai’]	[‘bai*’]
3	7	What will be the output of the following Python code? re.findall('good', 'good is good') re.findall('good', 'bad is good')	A	1	[‘good’, ‘good’] [‘good’]	(‘good’, ‘good’) (good)	(‘good’) (‘good’)	[‘good’] [‘good’]
3	8	What will be the output of the following Python code? re.split(r'(n\d)=', 'n1=3.1, n2=5, n3=4.565')	B	1	Error	[”, ‘n1’, ‘3.1, ‘, ‘n2’, ‘5, ‘, ‘n3’, ‘4.565’]	[‘n1’, ‘3.1, ‘, ‘n2’, ‘5, ‘, ‘n3’, ‘4.565’]	[‘3.1, ‘, ‘5, ‘, ‘4.565’]
3	9	Which of the following special characters represents a comment (that is, the contents of the parenthesis are simply ignores)?	D	1	(?:…)	(?=…)	(?!…)	(?#…)
3	10	What will be the output of the following Python code? re.split(r'(a)(t)', 'Maths is a difficult subject')	D	1	[‘M a t h s i s a d i f f i c u l t s u b j e c t’]	[‘Maths’, ‘is’, ‘a’, ‘difficult’, ‘subject’]	‘Maths is a difficult subject’	[‘M’, ‘a’, ‘t’, ‘hs is a difficult subject’]
3	11	What will be the output of the following Python code? n = re.sub(r'\w+', 'Hello', 'Cats and dogs')	B	1	Hello Hello Hello	‘Hello Hello Hello’	[‘Hello’, ‘Hello’, ‘Hello’]	(‘Hello’, ‘Hello’, ‘Hello’)
3	12	What will be the output of the following Python code? re.split(r'\s+', 'Chrome is better than explorer', maxspilt=3)	B	1	[‘Chrome’, ‘is’, ‘better’, ‘than’, ‘explorer’]	[‘Chrome’, ‘is’, ‘better’, ‘than explorer’]	(‘Chrome’, ‘is’, ‘better’, ‘than explorer’)	‘Chrome is better’ ‘than explorer’

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

Note : This question bank is only for reference purpose. LJU Test question paper may not be completely set from this question bank.

unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
3	13	What will be the output of the following Python code? re.sub('Y', 'X', 'AAAAAA', count=2)	D	1	'YXAAAA'	('YXAAAA')	('AAAAAA')	'AAAAAA'
3	14	The expression a{5} will match _____ characters with the previous regular expression.	B	1	5 or less	exactly 5	5 or more	exactly 4
3	15	Which function returns a list containing all matches?	A	1	findall	search	split	find
3	16	Which character stand for Starts with in regex?	B	1	&	^	#	$
3	17	Which character stand for Zero or more occurrences in regex?	A	1	*	#	@	|
3	18	In Regex, s stands for?	C	1	Returns a match where the string DOES NOT contain digits	Returns a match where the string DOES NOT contain a white space character	Returns a match where the string contains a white space character	Returns a match if the specified characters are at the end of the string
3	19	In Regex, [a-n] stands for?	B	1	Returns a match for any digit between 0 and 9	Returns a match for any lower case character, alphabetically between a and n	Returns a match for any two-digit numbers from 00 and 59	Returns a match for any character EXCEPT a, r, and n

3	20	What will the following code print?
		import re
		hand = open('mbox-short.txt')
		for line in hand:
		line = line.rstrip()
		if re.search('^From:', line):
		print(line)
			C	1	Any line containing 'From'	Any line that starts with 'From'	Any line that starts with 'From:'	Any line containing 'From:'

3	21	Which of the following options is the correct way to import the regex library?	B	1	import regex	import re	import Regex	import Re
3	22	Which of these option will match digits in a string?	A	1	[0-9]	\D	\s	\w
3	23	Which of the following regex statements will match and return any price of the form $3.45 or $23.32 or $400 found in the string 'x'?	D	1	re.findall('$\d+\.\d{2}', x)	re.findall('$\d+(?:\.\d{2})?', x)	re.findall('$\d+(\.\d{2})?', x)	re.findall('$\d+(?:\.\d{2})?', x)
3	24	The character Dot (that is, '.') in the default mode, matches any character other than _____	D	1	caret	ampersand	percentage symbol	newline
3	25	_____ matches the start of the string. _____ matches the end of the string.	A	1	'^', '$'	'$', '^'	'$', '?'	'?', '^'
3	26	What does the command ab+c search for?	C	1	ac,abc,abbc, and so on	ab,abc,abcc and so on	abc,abbc,abbbc and so on	None of the above
3	27	The number of matches does the command a{1,3} give with the string aabbaaaa?	A	1	3	2	1	4
3	28	What does the sequence \D finds the match?	B	1	Decimal digits	Non-decimal digits	Division	None of the above
3	29	Which of the following command is used to search a match for 1,2,3,4?	D	1	[1-4]	(1-3)	[1234]	Both A and C

3	30	The output of the two codes shown below is the same. Select the correct option.
		CODE 1
		>>> re.split(r'(a)(t)', 'The night sky')
		CODE 2
		>>> re.split(r'\s+', 'The night sky')
			B	1	TRUE	FALSE	Maybe	Can't say

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
3	31	Given below are the regular expressions 1. (a|b)* 2. (a*b*)* 3. (ab)* which of them are equivalent?	B	1	1 and 3 only	1 & 2 only	2 and 3 only	All are same
3	32	Which of the following is not a metacharacter in the re module?	B	1	^	&	\	|
3	33	What is the output of the code shown below? print(re.split('\d','abc123xyz',maxsplit=1))	A	1	['abc', '23xyz']	['abc', '123xyz']	['abc123xyz']	['abc1', '23xyz']
3	34	What is the output of the below code? re.sub('a','u','aeiou!')	A	1	ueiou!'	eiou!'	eio!'	None of these
3	35	Which of the following is not an application of regular expressions?	D	1	Text processing	Lexical analysis	Search Engines	None of these
3	36	Which of the following will give the output as 1?	B	1	len(re.findall('[12]','134562'))	len(re.search(r'n','Python').group())	len(re.split('\s','Welcome to PythonGeeks',maxsplit=0))	len(re.split('s','Welcome to PythonGeeks',maxsplit=1))
3	37	From the following which regular expression gives none or many instances of an x or y is?	B	1	(x+y)	(x+y)*	(x*+y)	(xy)*
3	38	From the following which regular expression denotes a language comprising all possible strings of even length over the alphabet(0,1)?	D	1	1+0(1+0)*	(0+1)(1+0)*	(1+0)	(00+0111+10)*
3	39	Which Python library runs a function as thread?	A	1	thread	threading	_threading	None
3	40	Which thread method is used to wait until it terminates?	A	1	join()	wait()	waitforthread()	None
3	41	A single sequential flow of control within a program is _____	B	1	Task	Thread	Process	Structure
3	42	What does the Thread.join() method do?	C	1	Adds the thread to a pool	Restricts access to a resource	Waits for the thread to finish	Merges two threads into one
3	43	Which of the following best defines a thread?	C	1	A thread is a memory location that holds the instruction	A thread is a set of instructions that execute at a time	A thread is a set of instructions that can execute independently	All the above
3	44	Which of the following is true about the thread of a program?	D	1	Every program has a main thread	All the threads have the same id	There can be more than one thread set to a program	All the above
3	45	Which of the following is not an advantage of multithreading?	C	1	Parallel execution	Decrease in time of execution	Decrease in complexity	Increase in the efficiency
3	46	Which of the following codes is the correct way to create a thread for the function named func?	A	1	threading.Thread(target=func)	threading.Thread(target='func')	threading.Thread(func)	threading.Thread('func')
3	47	Which of the function is used to wait till the previous thread is completed?	A	1	thread.join()	thread.wait()	thread.stop()	thread.run()

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

Note : This question bank is only for reference purpose. LJU Test question paper may not be completely set from this question bank.

unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
3	48	From the following which is not the disadvantage of multithreading?	C	1	Careful synchronization is required	Sometimes create space-related issues in case of blocked threads	It provides impendent action support to pass or fail accordingly	None of the above
3	49	Write a python program to print Phone number from given string using regular expressions.		3				
3	50	Write a Python program to check that a string contains only a certain set of characters (in this case a-z, A-Z and 0-9).		3				
3	51	Write a Python program that matches a string that has an a followed by zero or more b's.		4				
3	52	Write a Python program that matches a string that has an a followed by one or more b's.		4				
3	53	Write a Python program that matches a string that has an a followed by zero or one 'b'.		4				
3	54	Write a Python program that matches a string that has an a followed by three 'b'.		4				
3	55	Write a Python program that matches a string that has an a followed by two to three 'b'.		4				
3	56	Write a Python program to find sequences of lowercase letters joined by an underscore.		4				
3	57	Write a Python program to find the sequences of one upper case letter followed by lower case letters.		4				
3	58	Write a Python program that matches a string that has an 'a' followed by anything ending in 'b'.		4				
3	59	Write a Python program that matches a word at the beginning of a string.		4				
3	60	Write a Python program that matches a word at the end of a string, with optional punctuation.		4				
3	61	Write a Python program that matches a word containing 'z'.		4				
3	62	Write a Python program to match a string that contains only upper and lowercase letters, numbers, and underscores.		4				
3	63	Write a Python program that starts each string with a specific number.		4				
3	64	Write a Python program to remove leading zeros from an IP address.		4				
3	65	Write a Python program to check for a number at the end of a string.		4				
3	66	Write a Python program to search for literal strings within a string.		4				
3	67	Write a Python program to find the substrings within a string.		3				
3	68	Write a Python program to extract year, month and date from an URL.		4				
3	69	Write a Python program to convert a date of yyyy-mm-dd format to dd-mm-yyyy format.		4				
3	70	Write a Python program to separate and print the numbers in a given string.		4				
3	71	Write a Python program to find all words starting with 'a' or 'e' in a given string.		4				
3	72	Write a Python program to abbreviate 'Road' as 'Rd.' in a given string.		3				
3	73	Write a Python program to replace all occurrences of a space, comma, or dot with a colon.		3				
3	74	Write a Python program to replace maximum 2 occurrences of space, comma, or dot with a colon.		3				
3	75	Write a Python program to convert a camel-case string to a snake-case string.		4				
3	76	Write a Python program to remove multiple spaces from a string and store the output in list.		3				
3	77	Write a Python program to remove multiple spaces from a string.		3				
3	78	Write a Python program to remove all whitespaces from a string.		3				
3	79	Write a Python program to split a string into uppercase letters.		3				
3	80	Write a Python program to remove the parenthesis area in a string.		3				
3	81	Write a Python program to insert spaces between words starting with capital letters.		4				
3	82	Write a Python program that reads a given expression and evaluates it.		7				
3	83	Write a Python program to remove lowercase substrings from a given string.		4				
3	84	Write a Python program that checks whether a word starts and ends with a vowel in a given string. Return true if a word matches the condition; otherwise, return false. Sample Data: ("Red Orange White") -> True ("Red White Black") -> False ("abcd dkise eosksu") -> True		4				

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
3	85	Write a Python program that takes a string with some words. For two consecutive words in the said string, check whether the first word ends with a vowel and the next word begins with a vowel. If the program meets the condition, return true, otherwise false. Only one space is allowed between the words. Sample Data: ("These exercises can be used for practice.") -> True ("Following exercises should be removed for practice.") -> False ("I use these stories in my classroom.") -> True		4				
3	86	Create a function called Print_message, that accepts the messagestring as an argument and prints it. Call this function in two different threads. In the first thread, pass the message "Python 1" and in the second thread, pass the message "Pyhon 2".		7				
4	1	What protocol can be used to retrieve web pages using python?	C	1	urllib	bs4	HTTP	GET
4	2	What provides two way communication between two different programs in a network.	A	1	socket	port	http	protocol
4	3	Which method of the socket module allows a server socket to accept requests from a client socket from another host?	A	1	socket.accep	socket.sendt	socket.accep	accept.socket()
4	4	Which method of the socket module allows you to send data to a given address?	C	1	socket.sendt	socket.addre	socket.sendt	socket.data
4	5	Which method of the socket module allows you to associate a host and a port with a specific socket?	B	1	The socket.sendto(PORT) method	The bind(IP,PORT) method	The bind(PORT,IP) method	The socket.accept(PORT) method
4	6	What is the difference between the TCP and UDP protocols, and how do you implement them in Python with the socket module?	D	1	TCP is	There are no	TCP is not	TCP is
4	7	Which function is used to create the socket object?	A	1	socket()	bind()	listen()	accept()
4	8	Which function is used to bind-address to the socket? It takes two arguments hostname and port number.	B	1	socket()	bind()	listen()	accept()
4	9	Which function is used to establish and start the TCP listener?	C	1	socket()	bind()	listen()	accept()
4	10	Which function is used for TCP client connection until the connection is established?	D	1	socket()	bind()	listen()	accept()
4	11	Which function is used to initiate a TCP server connection?	D	1	socket()	bind()	listen()	connect()
4	12	Which function is used to send the UDP messages?	A	1	sendto()	send()	recv()	recvfrom()
4	13	Which function is used to send the TCP messages?	B	1	sendto()	send()	recv()	recvfrom()
4	14	Which function is used to receive the TCP messages?	C	1	sendto()	send()	recv()	recvfrom()
4	15	Which module in Python is used for working with sockets?	D	1	api	requests	json	socket
4	16	Which of the following needs to passed as an argument in connect() function for connecting client to server?	C	1	host	port	(host , port)	(host)
4	17	Which function is used to close a socket.?	D	1	socket()	bind()	listen()	close()
4	18	Which function is used to receive the UDP messages?	D	1	sendto()	send()	recv()	recvfrom()
4	19	Which of the following function is used to receive data from client to server when socket type is SOCK_STREAM?	C	1	sendto()	send()	recv()	recvfrom()
4	20	Which of the following libraries is used to parse data received from Open Weather Map API?	D	1	api	request	requests	json
4	21	What is the default encoding of encode() function in python.	A	1	UTF-8	UTF-4	UTF-16	UTF-32
4	22	Given the below html, how would this tag type be described in web scraping code? <h1 class='sports'>Sports News</h1>	D	1	h1	h1, class='sports'	h1, class_='sports'	h1', class_='sports'
4	23	What method in Beautiful Soup is used to find the first occurrence of a particular HTML element?	B	1	find_parent()	find()	select()	get_text()
4	24	What method in Beautiful Soup is used to find the ALL occurrence of a particular HTML element?	B	1	find_parent()	find_all()	select()	get_text()
4	25	Which line of code correctly gets the first item in items and makes the most sense following the below code? soup = BeautifulSoup(response.content, 'html.parser') items = soup.find_all(class_='items')	A	1	first_item = items[0]	first_item = items.find(0)	first_item = items.get(0)	first_item = items.find[0]
4	26	how does one get the first header 1 tag after creating a soup object?	A	1	soup.h1	soup.header1	soup.h1[0]	soup.h1[1]
4	27	Which of the following finds all link tags?	D	1	all_links = soup.find('a')	all_links = soup.findall('a')	all_links = soup.findall('link')	all_links = soup.find_all('a')
4	28	Which of the following finds all paragraph tags with class b-soup?	C	1	all_links = soup.find_all('p', class='b-soup')	all_links = soup.find_all('paragraph', class='b-soup')	all_links = soup.find_all('p', class_='b-soup')	all_links = soup.find_all('paragraph', class_='b-soup')

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
4	29	Which format is constructed by nesting python dictionaries and lists as needed.	A	1	JSON	HTTP	HTML	XML
4	30	which function formats the Beautiful Soup parsed data, so that there each tag is on its own separate line with indentation.	A	1	prettify()	beutify()	dump()	dumpS()
4	31	Which of the function of json library is used to print a json file with required indent?	B	1	dummy()	dumps()	dummys()	dump()
4	32	Which of the following libraries is used to get response using api key from Open Weather Map api?	B	1	api	requests	json	socket
4	33	write a python program to build a udp server side program		3				
4	34	write a Python program to build a tcp server-side program		3				
4	35	write a Python program to build a UDP client-side program		3				
4	36	write a Python program to build a TCP client-side program		3				
4	37	Write a Python program to build a UDP localhost host server that accepts a number from clients and returns the cube of that number to the client.		4				
4	38	Write a Python program to build a UDP localhost host server that accepts a number from clients and returns the square of that number to the client. (Only write server		4				
4	39	Write a Python program to build a UDP host server that accepts a message from clients and returns the same message to the client. Write programs for both the server		4				
4	40	Write a Python program to build a TCP host server that accepts a message from clients and returns the same message to the client. Write programs for both the server		4				
4	41	write a program for making HTTP requests with sockets in Python. Make a socket to receive the data from the link: " https://www.ljku.edu.in/lju-at-a-glance "		4				
4	42	Using Open Weather Map API, generate current air pollution data for		3				
4	43	Using the Open Weather Map API, generate a 3 Hourly 5 Days weather forecast for Ahmedabad with all details in JSON format.		4				
4	44	Using the Open Weather Map API, find the location of ahmedabad		3				
4	45	Using the Open Weather Map API, find the wind_speed of ahmedabad		4				
4	46	Using the Open Weather Map API, generate a 3 hourly 5 days weather forecast for Ahmedabad with details like minimum temperature, maximum temperature, wind		5				
4	47	Write a Python program using beautiful soup to scrape all the news headlines in the div class "top news" from https://indianexpress.com/		5				
4	48	Write a program for web scrapping using BeautifulSoup to scrape the following details from the given link and make a data frame using that scraped data from		6				
4	49	Write a program of web scrapping using BeautifulSoup to scrape the given data from the following link.		5				
4	50	Write a Python program to find the title tags from a given html document. html_doc = """		3				
4	51	Write a Python program to retrieve all the paragraph tags from a given HTML document. html_doc = """		3				
4	52	Write a Python program to get the number of paragraph tags of a given html document. html_doc = """		3				
4	53	Write a Python program to extract the text in the first paragraph tag of a given HTML document. html_doc = """		3				
4	54	Write a Python program to find the length of the text of the first <h2> tag of a given html document html_doc = """		3				
4	55	Write a Python program to find the text of the first <a> tag of a given html text.		3				
4	56	Write a Python program to extract all the URLs from the webpage python.org that are nested within tags from.		5				
4	57	Write a Python program to find all the h2 tags and list the first four from the webpage python.org.		5				
4	58	Find all the link tags and list the first ten from the webpage python.org		4				
4	59	Write a Python program to a list of all the h1, h2, h3 tags from the webpage python.org.		4				
4	60	Write a Python program to extract all the text from a given web page python.org.		3				
4	61	How to get the Daily News using Python. url='https://www.bbc.com/news'		5				
4	62	Find the title of the webpage. url = 'https://en.wikipedia.org/wiki/Python_(programming_language)'		4				
4	63	Find all the links on the page and print their URLs. url = 'https://en.wikipedia.org/wiki/Python_(programming_language)'		4				
4	64	Find the first paragraph on the page and print its text. url = 'https://en.wikipedia.org/wiki/Python_(programming_language)'		4				
4	65	Find all the headings on the page and print their text. url = 'https://en.wikipedia.org/wiki/Python_(programming_language)'		5				
4	66	Find the table on the page and its rows, Extract the data from each row, and print it url =		5				
4	67	Find all the citation needed tags on the page.url = 'https://en.wikipedia.org/wiki/Python_(programming_language)'		5				
5	1	Which of the following pandas functions is used to convert categorical data into numeric data?	A	1	get_dummies()	numeric()	get_categorical()	get_dumps()
5	2	How do you handle missing or corrupted data in a dataset?	D	1	Drop missing rows or columns	Replace missing values with mean/median/mode	Assign a unique category to missing values	All of these

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
5	3	When performing regression or classification, which of the following is the correct way to preprocess the data?	A	1	Normalize the data -> PCA -> training	PCA -> normalize PCA output -> training	Normalize the data -> PCA -> normalize PCA output -> training	None of these
5	4	Which Analysis is known as Non-Statistical Analysis?	B	1	Quantitative Analysis	Qualitative Analysis	Both A and B	None of these
5	5	Data Analysis is a process of?	D	1	inspecting data	cleaning data	transforming data	All of these
5	6	Supervised learning and unsupervised clustering both require which is correct according to the statement.	A	1	input attribute	hidden attribute	output attribute	categorical attribute
5	7	You are given reviews of few Netflix series marked as positive, negative and neutral. Classifying reviews of a new netflix series is an example of_____	C	1	unsupervised learning	semi supervised learning	supervised learning	reinforcement learning
5	8	For categorical data, ____ cannot be used as a measure of central tendency.	D	1	Median	Mean	Quartile	None of these
5	9	What is Scikit-learn?	A	1	A machine learning library in Python	A data visualization library in Python	A natural language processing library in Python	A web development framework in Python
5	10	Which of the following is an example of a regression algorithm in Scikit-learn?	C	1	K-means clustering	Decision tree	Linear regression	Support vector machines (SVM)
5	11	How would you access the column "symboling" from the dataframe df?	A	1	df["symboling"]	df=="symboling"	df[:"symboling"]	df[{"symboling"}]
5	12	What is the correct symbol for missing data?	B	1	na	nan	none	non
5	13	Why do we convert values of Categorical Variables into numerical values?	A	1	Most statistical models cannot take in objects or strings as inputs	To save memory	To save time	None of these
5	14	What task do the following lines of code perform? avg=df['horsepower'].mean(axis=0) df['horsepower'].replace(np.nan, avg)	C	1	nothing; because the parameter inplace is not set to true	calculate the mean value for the 'horsepower' column and replace all the NaN values of that column by the mean value	replace all the NaN values with the mean	None of these
5	15	How would you rename column name from "highway-mpg" to "highway-L/100km"?	A	1	df.rename(columns={'"highway-mpg"':'highway-L/100km'}, inplace=True)	df.rename(columns={'"highway-mpg"':'highway-L/100km'), inplace=True)	rename(df,columns={'"highway-mpg"':'highway-L/100km'})	rename(df,columns={'"highway-mpg"':'highway-L/100km'))

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
5	16	What data type is the following set of numbers? 666, 1.1,232,23.12	B	1	int	float	str	bool
5	17	From where you can import LinearRegression?	C	1	sklearn.metrics	sklearn.linearmodel	sklearn.linear_model	sklearn. model_selection
5	18	From where you can import train_test_split?	D	1	sklearn.metrics	sklearn.linearmodel	sklearn.linear_model	sklearn. model_selection
5	19	What is the purpose of the predict() method in sklearn?	B	1	To train a model using a given dataset	To make predictions using a trained model	To evaluate the performance of a model	To split the data in train and test data
5	20	What is the purpose of the fit() method in sklearn?	A	1	To train a model using a given dataset	To evaluate the performance of a model	To create a plot of predicted values	All of these
5	21	If we pass x and y to a function train_test_split(), we will get output in which order?	B	1	x_train, y_train, x_test, y_test	x_train, x_test, y_train, y_test	x_train, y_test, x_test, y_train	y_train, y_test, x_train, x_test
5	22	Consider the following lines of code, what is the name of the column that contains the target values: from sklearn.linear_model import LinearRegression lm=LinearRegression() X = df[['highway-mpg']] Y = df['price'] lm.fit(X, Y) Yhat=lm.predict(X)	A	1	price	highway-mpg	Both A and B	None of these
5	23	If X is a dataframe with 100 rows and 5 columns, and y is the target with 100 samples, and assuming all the relevant libraries and data have been imported, and the following line of code has been executed: LR = LinearRegression() LR.fit(X, y) yhat = LR.predict(X)	C	1	50	500	100	5
		Write a program to make a model based on linear regression for the following dataframe created from a csv file named “Package.csv” of x and y which follows equation y = a + bx. Write a program which can predict value of y based on any value of x, also write code to find value of a and b in above equation. Given Data in csv file:						

L.J Institute of Engineering and Technology, Ahmedabad.
Python-2 Question Bank (SEM-IV)

Note : This question bank is only for reference purpose. LJU Test question paper may not be completely set from this question bank.

unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
5	24	<table><tr><th>cgpa</th><th>package</th></tr><tr><td>6.89</td><td>3.26</td></tr><tr><td>5.12</td><td>1.98</td></tr><tr><td>7.82</td><td>3.25</td></tr><tr><td>7.42</td><td>3.67</td></tr><tr><td>6.94</td><td>3.57</td></tr><tr><td>7.89</td><td>2.99</td></tr><tr><td>6.73</td><td>2.60</td></tr><tr><td>6.75</td><td>2.48</td></tr><tr><td>6.09</td><td>2.31</td></tr><tr><td>8.31</td><td>3.51</td></tr><tr><td>5.32</td><td>1.86</td></tr><tr><td>6.61</td><td>2.60</td></tr><tr><td>8.94</td><td>3.65</td></tr><tr><td>6.93</td><td>2.89</td></tr><tr><td>7.73</td><td>3.42</td></tr></table>		3				
5	25	Write a program to make a model based on linear regression for the following dataframe created from a csv file named “data.csv” of x1 and y which follows equation y = a+bx1. Write a program which can predict value of y based on any value of x, also write code to find value of a and b in above equation. Given Data in csv file: <table><tr><th>y</th><th>X_1</th></tr><tr><td>140</td><td>60</td></tr><tr><td>155</td><td>62</td></tr><tr><td>159</td><td>67</td></tr><tr><td>179</td><td>70</td></tr><tr><td>192</td><td>71</td></tr><tr><td>200</td><td>72</td></tr><tr><td>212</td><td>75</td></tr><tr><td>215</td><td>78</td></tr></table>		3				
5	26	Write a program to create a Model using linear regression to predict the price of house using the csv file provided named “Housing.csv”. Do the required process in the data before making a model. Find predicted values, co-efficients, intercept and mean squared error.		4				

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Python-2 Question Bank (SEM-IV)

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unit_number	group_id	question_text	answer_text	marks	option1	option2	option3	option4
5	27	What is true about Machine Learning?	D	1	Machine Learning (ML) is that field of computer science	ML is a type of artificial intelligence that extract patterns out of raw data by using an algorithm or method.	The main focus of ML is to allow computer systems learn from experience without being explicitly programmed or human intervention.	All of these