



Mid Term Lab Examination: May 2018

Programme	:	B.Tech (CSE)	Semester	:	Summar-1:2017-18
Course	:	Data Visualization	Code	:	CSE3020
Faculty	:	Prof. Ramesh Ragala	Slot	:	L2+L3+L6
Time	:	90 minutes	Max.Marks	:	50
Class Number	:	1166		:	

Algorithm or Procedure	15
Program	25
Output	10

Q.No	Question Description	Marks																																	
1	<p>mtcars dataset description:</p> <p>A data frame with 32 observations on 11 variables.</p> <table><tr><td>1</td><td>mpg</td><td>Miles /(US) gallon</td></tr><tr><td>2</td><td>cyl</td><td>number of cylinders</td></tr><tr><td>3</td><td>disp</td><td>displacement (cu.in)</td></tr><tr><td>4</td><td>hp</td><td>Gross horsepower</td></tr><tr><td>5</td><td>drat</td><td>Rear axle ratio</td></tr><tr><td>6</td><td>wt</td><td>Weight (1000 lbs)</td></tr><tr><td>7</td><td>qsec</td><td>1/4 mile time</td></tr><tr><td>8</td><td>vs</td><td>V/S</td></tr><tr><td>9</td><td>am</td><td>Transmission (0 = automatic, 1 = manual)</td></tr><tr><td>10</td><td>gear</td><td>Number of forward gears</td></tr><tr><td>11</td><td>carb</td><td>Number of carburetors</td></tr></table> <p>Problems:</p> <ol style="list-style-type: none">1. Draw a plot, which clearly makes a count of each gear type in mtcars2. Draw a plot, which clearly makes the relative contribution of number of cylinders(use color mapping) in counts of each gear.3. Draw a plot, which gives the correlation between weight and milles/gallon in mtcars4. Draw a plot, which clearly gives the relation between petal and sepal length in iris dataset. The plot should provide the separation lines for each species category. Also use different color mapping code to each species catergy for easy understanding	1	mpg	Miles /(US) gallon	2	cyl	number of cylinders	3	disp	displacement (cu.in)	4	hp	Gross horsepower	5	drat	Rear axle ratio	6	wt	Weight (1000 lbs)	7	qsec	1/4 mile time	8	vs	V/S	9	am	Transmission (0 = automatic, 1 = manual)	10	gear	Number of forward gears	11	carb	Number of carburetors	50
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