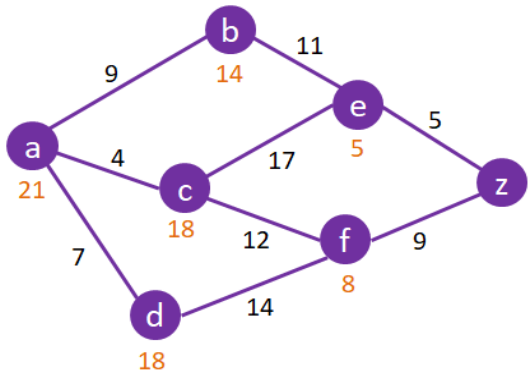
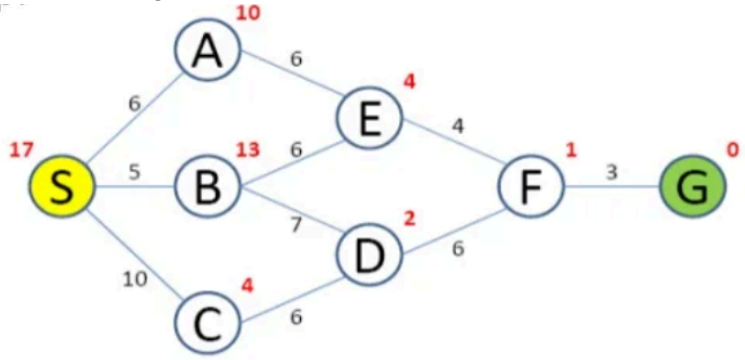
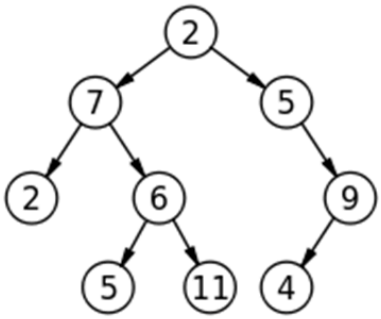
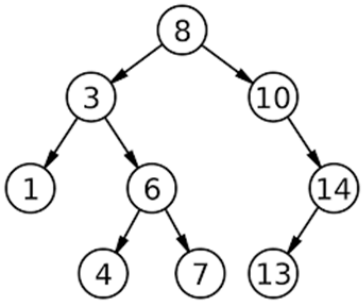
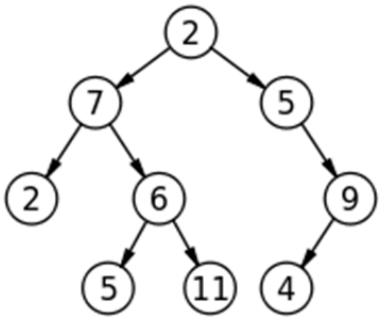
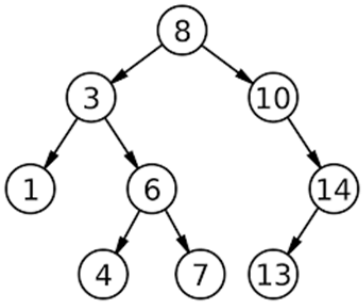
RK UNIVERSITY
SCHOOL OF ENGINEERING
SEE (April-2024)

Program: B. Tech. **Semester: VI**
Date : 13/04/2024 **Reporting time: 8:00AM**
Duration: 90 Mins **Total Marks: 50**
Subject :CE628 Artificial Intelligence and Machine Learning

Dataset download link: 🗀 **SET-2**

Q. No		Do as directed.	Marks
1	a	Find path using A* algorithm. 	5
	b	Implement A* algorithm. 	
2	a	Implement BFS for a given graph.	5

		 Image 1  Image 2	
	b	Implement DFS for a given graph.  Image 1  Image 2	
3	a	Read iris.csv dataset.	1
	b	Replace Spicescolumn category "Iris-versicolor" with "versicolor".	2
	c	Print rows values from 101 to 125.	2
4	a	Read dataset “Clean_Dataset”.	1
	b	Draw Donut plot for ‘source_city’.	2
	c	Draw Histogram plot for ‘price’.	2
5	a	Read dataset “CarSalesPreprocessingDataset.csv”.	1
	b	Look inside data and find any one categorical text data.	2
	c	Do Ordinal Encoding using scikit-learn library.	2
6	a	Read dataset “spambase.csv”	1

	b	Split the data into a train and test set with suitable size.	2
	c	Implement Boosting using Adaboost Algorithm.	2
7	a	Create a numpy 1D array with 20 elements of random values between 10 to 20.	1
	b	Create a numpy 2D array with size 4 by 5. Element values are random numbers. Print 2D array.	2
	c	Find minimum value and maximum value from above 1D array (Que. 7a)	2
8	a	Define purpose of classification.	1
	b	List different metrics of classification and regression tasks.	2
	c	How bias and variance are given effect for well fitted and well generated models.	2
9	a	Read the “mobile.csv” dataset.	1
	b	Draw scatter plot of purchased and not_purchased value with respect to Age and EstimatedSalary.	2
	c	Do Feature engineering (normalize the Age and EstimatedSalary columns)	2
10	a	Split the dataset into train and test data (with reference of que. 9)	1
	b	Build the kNN model with k=5,k=3,k=7.	2
	c	Evaluate model performance on train and test sets with different values of k.	2

*******ALL THE BEST*********