



Course:	PROGRAMMING IN C			Semester:	Second
Division:	ALL	Batch:		Date:	24/04/2024
Exam:	ON-SCREEN TEST			Time:	10 AM to 12 PM
Name:				Roll No:	

SET B

Q No	Question	Marks			
1	<p>Attempt any one</p> <p>a) In a small firm there are 5 salesmen. Each salesman is supposed to sell 5 products. Write a C program using a two-dimensional array to print below attributes.</p> <ul style="list-style-type: none"> i) Total sales done by each salesman ii) Total sales of each item <p>b) Implement a function in C that finds the maximum number from a sequence entered by the user. The function should have the following specifications:</p> <ul style="list-style-type: none"> • Function Name: <i>findMax</i> • Parameters: <ul style="list-style-type: none"> • n: size of a sequence (input by the user). • sequence: An array representing the user-entered sequence of integers. • Return Value: <ul style="list-style-type: none"> • The maximum value found in the sequence • If the sequence is empty it will return -1. • Display: <ul style="list-style-type: none"> • The result (maximum value or -1) should be displayed in the main function. <p>You should prompt the user to enter the size(n) and sequence of integers, store them in an array. Call the <i>findMax</i> function with the provided n and sequence to determine the maximum number (if it exists) and display the result.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px; vertical-align: top;"> Test Case 1: Input : n= 10 2 3 1 4 5 3 6 4 3 8 Output: 8 </td> <td style="padding: 5px; vertical-align: top;"> Test Case 2: Input : n = 0 Output: -1 </td> <td style="padding: 5px; vertical-align: top;"> Test Case 3: Input : n = 5 7 6 3 5 2 Output: 7 </td> </tr> </table>	Test Case 1: Input : n= 10 2 3 1 4 5 3 6 4 3 8 Output: 8	Test Case 2: Input : n = 0 Output: -1	Test Case 3: Input : n = 5 7 6 3 5 2 Output: 7	15
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<p>2 Attempt any one</p> <p>a) Design a structure to represent the information of stock with the following attributes: Stock_id, Stock_name, Price, Quantity arrange the information in descending order by quantity.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: left;"> <tr> <td style="padding: 5px;">Test Case 1: Input: Enter the number of stocks: 2 Enter Stock_id: 101 Enter Stock_Name: IRCTC Enter Price: 355 Enter Quantity: 3 Enter Stock_id:102 Enter Stock_Name: Reliance Enter Price:270 Enter Quantity: 4</td><td style="padding: 5px; vertical-align: top;"> Output: After Sorting: Stock_id:102 Stock_Name: Reliance Price:270 Quantity: 4 Stock_id: 101 Stock_Name: IRCTC Price: 355 Quantity: 3 </td></tr> </table> <p>b) WAP using Dynamic Memory Allocation to accept the following data of `students` having data members: "Student name, history marks, math's marks, science marks, percentage". Accept this data for 10 students and count the number of students belonging to each group of percentage: (groupA - 81% to 100%) (groupB - 66% to 80%) (groupC - 51% to 65%) (groupD - 0% to 50%) and display this data in proper tabular form.</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">eg:- Group</th><th style="text-align: center;">range</th><th style="text-align: center;">Student count</th></tr> </thead> <tbody> <tr> <td style="text-align: left;">A</td><td style="text-align: center;">81 to 100%</td><td style="text-align: center;">3</td></tr> <tr> <td style="text-align: left;">B</td><td style="text-align: center;">66 to 80%</td><td style="text-align: center;">3</td></tr> <tr> <td style="text-align: left;">C</td><td style="text-align: center;">51 to 65%</td><td style="text-align: center;">3</td></tr> <tr> <td style="text-align: left;">D</td><td style="text-align: center;">0 to 50%</td><td style="text-align: center;">1</td></tr> </tbody> </table>	Test Case 1: Input: Enter the number of stocks: 2 Enter Stock_id: 101 Enter Stock_Name: IRCTC Enter Price: 355 Enter Quantity: 3 Enter Stock_id:102 Enter Stock_Name: Reliance Enter Price:270 Enter Quantity: 4	Output: After Sorting: Stock_id:102 Stock_Name: Reliance Price:270 Quantity: 4 Stock_id: 101 Stock_Name: IRCTC Price: 355 Quantity: 3	eg:- Group	range	Student count	A	81 to 100%	3	B	66 to 80%	3	C	51 to 65%	3	D	0 to 50%	1	15
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