

**National University of Computer & Emerging Sciences**

**Computer Science Department**

**HOME WORK - ASSIGNMENT COVER SHEET**

COURSE TITLE	Programming Fundamentals	COURSE CODE	CS1002 CS
INSTRUCTOR	DR. EJAZ AHMED & Others	TYPE	<input type="checkbox"/> <input type="checkbox"/> (Please tick)
		Indiv.	Group
ASSIGNMENT NO	5		
ASSIGNMENT	Loan Installments Payments using Arrays		
HAND OUT DATE	1-DEC-2021	DUE DATE	07-DEC-2021
ESTIMATE TIME	10 Hours		

ASSESSMENT CRITERIA (or attached)	% Mark
<p>Instructions to Candidates:</p> <p>C++ Programming code with execution is required including all topics covered until Arrays (1-D in question-1 &amp; with 2-D in question-2). String can be used using string library. Marking will include DEMO of the submitted code. Marks 40+10.</p> <p>Individual effort is required</p>	

TO BE COMPLETED BY STUDENT (Who submitted)
NAME _____
ID NO _____
Time Taken _____
DECLARATION: I/We declare that this Home work is my/our group's own work
SIGNATURES (All members) _____

GRADE/ MARK AWARDED	<input type="checkbox"/>	COMMENTS _____
INSTRUCTOR'S SIGNATURE _____ DATE _____		

**Brief:****Question-1 (Marks 40):**

A bank is providing loan to its customers. Customers will return back loan with installments without any INTEREST but penalty charges are needed to be paid.

Fine Rs. 100 per day will be charged if amount is paid after due date and 5% penalty will be charged on Due amount if pay less amount. A sample data of all transactions is as follows. All gray colored entries are displaying text.

Submitted by RollNos:							
Loan Amount		50000		No. of Installments			5
SNO	DueAmount	DueDate	PaidAmount	PaidDate	No of Days	Penalty	Balance
1	10000	05/01/2021	5000	04/01/2021	0	500	5000
2	15500	05/02/2021	15500	01/02/2021	0	0	0
3	10000	05/03/2021	5000	07/03/2021	2	700	5000
4	15700	02/04/2021	15700	02/04/2021	0	0	0
5	10000	02/05/2021	5000	02/05/2021	0	500	5000
6	5500	02/06/2021	5500	01/06/2021	0	0	0
Total	66700		51700			1700	15000
Charges	6700						
Do you want to continue: Y							
Loan Amount		40000		No. of Installments			4
SNO	DueAmount	DueDate	PaidAmount	PaidDate	No of Days	Penalty	Balance
1	10000	...					
...							
Total	45000		...			...	...
Charges	5000						
Do you want to continue: N							
Summary							
Total Collection:	111700						
Total Charges:	11700						

**Question-2 (Marks 10):**

Add 2-Dimensional array along with the one dimension array used in Question-1. Display the results in tabular form after entering data using 2-Dimensional array.