

## UNITED INTERNATIONAL UNIVERSITY

Department of Computer Science and Engineering (CSE)

Course Title: Introduction to Computer Science Course Code: CSE1110

Trimester & Year: Spring 2022 Section: A Credit Hours: 1.0 AZ

## **CLASS EVALUATION 01**

Total Time: 40 minutes Total Marks: 20

1. Program that will take three integer numbers from keyboard but assign only the first and last inputs to variables and <u>skip</u> any assignment of the middle one.

Sample input	Sample output	
20 50 100	First Value = 20, Last Value = 100	
33 75 22	First Value = 33, Last Value = 22	

2. Program that will check whether a triangle is valid or not, when the three angles (angle value should be such that, 0 < value < 180) of the triangle are entered through the keyboard.

[Hint: A triangle is valid if the sum of all the three angles is equal to 180 degrees.]

Sample input		ıt	Sample output
90	45	45	Yes
30	110	40	Yes
160	20	30	No
0	180	0	No

3. Program that will take the final score of a student in a particular subject as input and find his/her grade.

Marks	Letter Grade	Marks	Letter Grade	Marks	Letter Grade
90-100	A	70-73	C+	Less than 55	F
86-89	A-	66-69	С		
82-85	B+	62-65	C-		
78-81	В	58-61	D+		
74-77	B-	55-57	D		



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Sample input	Sample output
91.5	Grade: A
50	Grade: F

- 4. In a factory there are three categories of employees: X, Y, Z. The manager announced a bonus for the employees who have
  - ➤ 12 years or more work experience and more than 5 family members, OR
  - Less than 1000.50 BDT total family income per month

He is also generous to his bonus deprived employees who have a larger family. Thus, He has declared the bonus for

- For the employees of 'Y' and 'Z' categories who have more than 8 family members and has less than 1100.78 BDT total family income per month.
- ➤ However, if an employee is from 'X' category, he can avail the bonus having more than 5 family members.

Now you need to automate the system by writing a program to take following inputs from user (employee) and notify him whether he is eligible for the bonus or not.

- Category (character)
- > Years of work experience (integer)
- ➤ Number of family members (integer)
- > Total family income per month (float)

Sample input	Sample output
X 11 6 1500	Will Receive the Bonus
Y 6 9 1500	Will Not Receive the Bonus