



University of Central Punjab

(Incorporated by Ordinance No. XXIV of 2002 promulgated by Government of the Punjab)

FACULTY OF INFORMATION TECHNOLOGY

Introduction to Computer

Section A5

Assignment No.	01
Topic(s)	<ul style="list-style-type: none">• Variables in C++• Arithmetic operations on data• Control Structure
Instructions	<p>Make a folder with your Registration no. and section e.g. L1F21BSCS0000_A5. Put all .cpp files in this folder with proper naming e.g. solution_1.cpp. Compress this folder (.zip) and submit it.</p> <p>You have to submit this assignment on CMS portal. You can find a submission there.</p> <p>No submission will be accepted after due time.</p>
Submission Deadline	Friday December 03, 2021 11:59 pm

Question No. 01

Write a computer program in C++ that ask user to enter any English alphabet. Program then displays the case of letter i.e. Lower case or Capital Case, the ASCII value of character e.g. 100 if 'd' is entered, and "EVEN" if ASCII is even or "ODD" otherwise. If user types a character other than English alphabets, it should display a message "Invalid character entered"

Expected Output:

Sample 1

Enter any character: a
Your typed a lower case letter
ASCII value for a is: 97
ASCII value for 'a' is an odd number

Sample 2

Enter any character: &
Invalid character

Sample 3

Enter any character: Z
Your typed a capital letter
ASCII value for a is: 90
ASCII value for 'Z' is an even number

Question No. 02

Write a computer program in C++ which ask user to enter petrol expenses of a vehicle in recent/last 3 months (individually) and milage (in kilometers) obtained in each month. Finally, program calculates the average petrol expense per liter based on performance of last 3 months.

[Formula: (Total expense in 3 months) / (Total distance covered in 3 months)]

Expected Output:

<p style="text-align: center;">Petrol Expense Calculator</p> <p style="text-align: center;">Month-1</p> <p>Please enter petrol expense: 1500</p> <p>Enter Milage(km) obtained: 120</p> <p style="text-align: center;">Month-2</p> <p>Please enter petrol expense: 1800</p> <p>Enter Milage(km) obtained: 110</p> <p style="text-align: center;">Month-3</p> <p>Please enter petrol expense: 1200</p> <p>Enter Milage(km) obtained: 85</p> <p style="text-align: center;">Answer:</p> <p>Average Petrol expense per Km is: 33.33</p>

Question No. 03

Write a program in C++ that ask user to enter month no. (i.e. 1 for Jan, 2 for Feb, ... 12 for Dec) and temperature e.g. 45. Your program should display "Its winter Season" if temperature is below 10 and month is Nov, Dec, Jan, or Feb OR it should display "Its Summer Season" otherwise.

Expected Output:

<p>Sample 01:</p> <p>Enter Month: 10</p> <p>Enter temperature: 32</p> <p>Its summer Season</p> <p>Sample 02:</p> <p>Enter Month: 1</p> <p>Enter temperature: -2</p> <p>Its Winter Season</p>
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Best of Luck