Aror University of Art, Architecture, Design & Heritage Sukkur.

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Department of Artificial Intelligence and Multimedia Gaming

Object Oriented Programming (Spring-2024)

LAB NO 02

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Objective of Lab No. 1:
After Completion of tasks performed in lab1, students will be able to:
- o Use of Decision Making statement
- o Use various data inputs to be taken from user of different data types
- o Use of type casting
- o Use of Loop statements (while, for, do…while, foreach)
- o Use of keywords break and continue
- o Nested Loops
- o Use of real life problem solving using loops
- o Use of Nano level program for user interaction

Part – A : The Few Key points for information/recall.

- Focus on Switch case
- Focus on if else statements
- Syntax of loops
- Syntax of getting values by prompt the user
- Which kind of data type is suitable to store results
- Use of Scanner Class (input)
- Recall/Recap String functions
- Purpose of Break and Continue
- Save file with class name with extension of .java
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Part B - Lab Tasks:

Task : 01 Create a program use any loop to print the table of 7 by 100
times
   1. 7 * 1 = 7
   2. 7 * 2 = 14
   3. …………...
   4. 7 * 100 =700

Task : 02 Write a program to ask user to enter any number in range of
100. Use while loop, to print number series in reverse order which
should only print odd numbers.

Task : 03 Use switch case, to check the validation. Prompt user to enter
any symbol, your program must check whether its vowel or semi-vowel
or consonant.

Task : 04 Write a program, ask user to enter any number from 1 to 999.
Your program display weather this number is palindrome or not. (few
example   of   palindrome.   1,   252,   909,464   )
 [Hint : Modulus Operator]

Task 05:Write a program to ask user to enter n_courses(total course.)
Iterate loop to take those inputs. Your program must display their total,
sum and average marks. [Assume Every subject has total of 150
maximum   marks]

Task 06:ATM Pin Code Verification. Write a program prompt the user to
enter user_pin_code. Iterate loop maximum of 3 times in case of wrong
input.   [Assume   correct   pin   code   is   7866].

Display " Welcome" if in first attempt user have entered valid pin code. In rest of cases keep asking from user until it provides correct pin code in maximum of 4 chances. [Use while and do while loop].

Task 06 : Write a program for user billing. Display user following chart.

Item Type	Unit Price
Apple	300
PineApple	500
Coconut	400
Oranges	100

Now, Your program should ask user to enter how many items he/she wants to purchase. Then iterate loop to take inputs of different selection along with its quantity. In last it must calculate its total cost.

Task 07 : Lets Play the game. Ask user maximum 5 times to guess a lucky number. If user has answered correctly, show him " You Won" in rest of cases "try again" and you ""loose after" 5th attempt.

Task 08: Ask user to enter two numbers and one of basic arithmetic operators, perform that operation and display result. Prompt user if he/she wants to perform again or press N for terminating the loop.

Task 09 : Ask user to input his/her name and use String functions to display it in Capital or in small letter desired by the user's choice.