

Lab Task 6

Requirements

- Complete all of the tasks defined below.
- Copy/Pasting (Plagiarism) from your classfellow will not be tolerated and will result in cancellation of your task.
- It is highly recommended that you use Notion.so to create your assignments.
- Each task must be solved in order.
- At the top of each file, following **MUST** be specified in the following manner:

```
Name: <Full-Name>
RollNumber: <Roll-Number>
Course: <Course-Name>
Date: <Date-of-Submission> (DD/MM/YYYY)
TotalQuestions: <Total-Questions>
AttemptedQuestions: <Number-of-questions-attempted>
---
```

Example:

```
Name: Ali Taqi Wajid
RollNumber: 190792
Course: CY243L - Penetration Testing - Lab
Date: 02/10/2023
TotalQuestions: 3
AttemptedQuestions: 3
---
```

⇒ *This structure has to be followed by each student, if not; it may result in slight deduction of marks from the task/quiz/assignment. Example at: DRIVE*

Submission Requirements

You are required to submit a single PDF file with the following naming convention:

```
<course-code>-<batch|section>-<roll_number>.pdf  
## Example:  
CY102L-F23-A-231521.pdf
```

⇒ Any other file name will not be considered.

Tasks for Lab-6

Task - 1:

Write a Bash script that takes two numbers as input: a starting number (`start`) and an ending number (`end`). The script should then use a `for` loop to generate and display a list of even numbers between the `start` and `end` (inclusive).

Task - 2:

Write a Bash script that uses a `for` loop to calculate and display the sum of all even numbers between 1 and 20. The script should then print the result.

Task - 3:

Create a Bash script that prompts the user to enter a number. Use a `while` loop to repeatedly ask the user for input until they enter a positive integer. Once a valid input is received, the script should print "Valid input received: [user's input]."

Task - 4:

You have a text file named "grades.txt" containing a list of student roll numbers, their first name, and their grades one entry per line. Write a Bash script that reads the file line by line using a `while` loop and displays the names of students who scored above 90 (an A grade). Each line in the file is in the format "Name Score."

Appendix:

The following is the content of `grades.txt` :

```
231501 Muhammad 92  
231502 Aisha 85  
231503 Ali 75  
231504 Fatima 93  
231505 Ahmed 78
```

231506 Sara 91
231507 Hassan 82
231508 Khadija 88
231509 Omar 89
231510 Maryam 94
231511 Hussein 97
231512 Layla 72
231513 Abdullah 89
231514 Zainab 91
231515 Khalid 84
231516 Nour 68
231517 Ibrahim 93
231518 Rania 76
231519 Hamza 70
231520 Hana 86
231521 Abdullah 90
231522 Leila 83
231523 Youssef 95
231524 Noor 79
231525 Mustafa 61
231526 Samira 90
231527 Bilal 73
231528 Zahra 85
231529 Mounir 65
231530 Lina 75
231531 Tariq 60
231532 Malak 82
231533 Talha 77
231534 Amina 68
231535 Walid 79
231536 Salma 74
231537 Youssef 96
231538 Amira 89
231539 Ahmed 92
231540 Abeer 81
231541 Karim 70
231542 Amal 80
231543 Imran 62

231544 Sana 77
231545 Jamal 87
231546 Safa 69
231547 Idris 99
231548 Rima 71
231549 Idris 93
231550 Dana 67

Good Luck!
