Programming Fundamentals Lab – 11

Muhammad Ali / 24K-3103
BS. Software Eng. - 01B

Q1 – Count Characters, Words, and Lines in a File.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

Apples-MacBook-Pro:Lab-11 apple$ gcc -o output Q1.c && ./output
Total Characters: 11
Total Words: 2
Total Lines: 2
Apples-MacBook-Pro:Lab-11 apple$ ▐
```

Q2 – Payroll System.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

Apples-MacBook-Pro:Lab-11 apple$ gcc -o output Q2.c && ./output
Enter Employee ID: 001
Enter Employee Name: Ali
Enter Basic Pay: 100
Enter Bonuses: 20
Enter Deductions: 50

Employee Details:
ID: 1
Name: Ali
Net Salary: 70.00
Apples-MacBook-Pro:Lab-11 apple$ ▐
```

Q3 – Merge Two Files.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

Apples-MacBook-Pro:Lab-11 apple$ gcc -o output Q3.c && ./output
Files merged successfully into 'merged.txt'.
Apples-MacBook-Pro:Lab-11 apple$ ▐
```

Q4 – Delete Contents of a File.

Lab-11 > ≡ data.txt

```
1    nna
2    mdkadma
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
○ Apples—MacBook—Pro:Lab—11 apple$ ▯
```

Lab-11 > ≡ data.txt

```
1
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
● Apples—MacBook—Pro:Lab—11 apple$ gcc —o output Q4.c && ./output
  File is now empty.
○ Apples—MacBook—Pro:Lab—11 apple$ ▮
```

Q5 – Sports Team Management.

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   PORTS

```
● Apples—MacBook—Pro:Lab—11 apple$ gcc —o output Q5.c && ./output
  Enter Team Name: leonfc
  Enter Sport: football
  Enter Number of Players: 2
  Enter Details for Player 1
  Name: Ali
  Age: 19
  Position: Mid
  Enter Details for Player 2
  Name: Raza
  Age: 19
  Position: Forward

  Team Details:
  Name: leonfc
  Sport: football
  Player 1 — Name: Ali, Age: 19, Position: Mid
  Player 2 — Name: Raza, Age: 19, Position: Forward
○ Apples—MacBook—Pro:Lab—11 apple$ ▮
```

Q6 – Log File with Timestamp.

log.txt U ✕   example.txt U   C Q2.c Lab-11 U   C Q3.c Lab-11

Lab-11 > log.txt

```
1      Program executed at: Sun Nov 24 23:09:15 2024
2      Program executed at: Sun Nov 24 23:09:27 2024
3
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
● Apples-MacBook-Pro:Lab-11 apple$ gcc -o output Q6.c && ./output
  Execution time logged to 'log.txt'.
● Apples-MacBook-Pro:Lab-11 apple$ gcc -o output Q6.c && ./output
  Execution time logged to 'log.txt'.
○ Apples-MacBook-Pro:Lab-11 apple$ ▯
```