Lab 07
PF – BSDS

Note: Kindly do your work, talking, sharing, and discussing is considered cheating (in any case) and strictly discouraged); therefore, be careful. TAs will be there for your help. Wait for TA if you have any queries.

Task 1: Write a program to test students in basic arithmetic operations, i.e., addition, subtraction & multiplication. Ask ten random questions. First, generate a random choice one, two or three. Against choice one, ask addition question. Against choice two, ask subtraction question and for three ask multiplication question.

For addition, generate two random numbers in range 0 to 99. For subtraction, generate first random number in range 10-99 and generate second random number smaller than first random number (think, how you can do that). For multiplication, generate random numbers in range 0 – 9.

For each user answer match it with required answer and show appropriate message to the user and move to next question. At the end, print score that is number of correct questions. See sample run for better understanding:

Sample Run:

1. Subtraction

N1: 5 N2: 2

Answer: 3

Correct

2. Addition

N1: 50 N2: 8

Answer: 57

Incorrect

3. Addition

N1: 45 N2: 53

Answer: 98

Correct

4. Multiplication

N1: 4 N2: 5

Answer: 15

Incorrect

...

Score : 7 out of 10

Task 2: There are thirty students registered in a course. Suppose their roll numbers are one to thirty. Generate their midterm, final term and sessional marks randomly out of 35, out of 40 and out of 25 and generate report:

Sample Run:

Roll No	Mid	Final	Sessional	Total	Grade
1	25	26	16	67	B-
2	28	34	20	82	A-
…					
30	20	30	20	70	B

Total: 30

Pass: 28

Fail: 2

Overall Average Marks:	**67.2**
Average Midterm Marks:	**22.6**
Average Sessional Marks:	**15.4**
Average Final term Marks:	**25.1**
Maximum Marks:	**94**
Maximum Midterm Marks:	**33**
Maximum Sessional Marks:	**24**
Maximum Final term Marks:	**37**
Minimum Marks:	**30**
Minimum Midterm Marks:	**10**
Minimum Sessional Marks:	**11**
Minimum Final term Marks:	**9**