BizzAppDev Systems Pvt. Ltd.

Forming Technology with ideas.

Basic Instructions for Examination :

- Develop a program in your logic, do not try to copy from the internet.

- Add the validation, the program should not have any error in any case.

- Program has to work from terminal and input and output will be taken/display in terminal.

- The program should be committed and pushed to GitHub private repo. Send a zip file from the GitHub repo.

- All programs should be written in OOPs concept if possible.

- The program should be written in python 3.6 or above.

- There should be a separate file for each question.

- Comments and docstring should mention in each file.

- Make sure to use the proper variable name and function name.

- Make sure to use proper Optimus code.

- Make sure to use proper indentation in four spaces only.

- Make sure to use proper naming conventions.

1. Provide a program for the calculator from terminal.

- Make sure it do not ask questions but when you press enter. it displays the result.
- Amount and formula has to be in one line.
  - **e.g** 456 - 12
    - 564/ 10
    - 456*1234+09-12

2. Provide a program to read the CSV file.

- CSV file has three columns, the first column names, the second column is birthdate(YYYY-MM-DD) the third column is salary.

- Read the file and display the data and age in the terminal.
- The file path, delimiter, and quote char are the input by the user.
- The program has to work from the terminal. The input and output have been taken/displayed on the terminal.

3. Provide a program to calculate the time and distance based on below problem.

- We have a 100-meter rod.

- At both ends, 1-1 cockroach is place.
- The left cockroach moves at 1 meter per second forward, and every 10 seconds moves 2 meters backward.
- The right cockroach moves at 2 meters per second forward, and every 5 seconds moves 1 meter backward.
- When both cockroaches meet, we have to calculate the time and distance. Calculate the total time to complete the 100 meter rod.

4. Provide a program to read the file from URL and display the content in terminal.

- The file URL has to be input by the user.

- The program has to work from the terminal. The input and output have been taken/displayed on the terminal.

5. Provide a program to create tables (Employee, Department, Project) in database Sqlite and insert the data.

- Make sure to add basic field, with employee to department and project relation.
- Make sure maintain M2M relation between employee and project.