WEB20-z SB101 C1 Evaluation

Note: All the questions are compulsory.

The duration of the test is 1.5 hours

Mode of Submission: Github

Link Don't seek help from any person/resource during the test.

Marks Distribution is as follows:

Q1: 2 Marks

Q2: 2 Marks

Q3: 2 Marks

Q4: 2. Marks

Q5: 2. Marks

Q1/- What do you mean by a Functional programming and Functional interface.

Write the implementations of all the following Functional interfaces with examples using the Lambda expression:

Predicate<Employee>: If the Employee salary is greater than 8000.

Consumer<Employee>: Print the Employee's details.

Supplier<Employee>: Get the Employee object with all details(empId, name, salary)

Function<String, Employee>: It takes the Employee details in comma separated String format

like, **String emp= "10,Manoj,80000" , (Here the details are empId, Name and Salary)** and return the Employee Object based on this comma separated String.

Q2/- Write following 2 bean classes:

```
class Student{
  roll,
  name,
  marks,
  address
}

class Employee{

  empId,
  name,
  salary,
  address
}
```

- Create a List of 5 Student object,

- Transform the Student whose marks is greater than 500 to the Employee object as

  roll should be the empId and employee salary should be **marks * 10000.** by using Stream API.

  Hint: make use of the map function of Stream API.

- Get all the employees in another List and sort all the employees object according to the salary in descending order by using Lambda Expression.

- Print both Employee's List and Original Student's List using Lambda expression.

Q3/- Create a List of 10 Students names, using stream API filter out only those names whose length is an even number, then transform that name into the upper case. and get the List of transformed names.
Sort the transformed List in descending order using Lambda expression.

Print both original and transformed List using Lambda Expressions.

Q4/- What are the features of Stream API in Java explain some of the intermediate and terminal methods of Stream object with one example.

Q5/- What do you mean by Method Reference, How to refer static method, non-static method and constructor, explain each one with proper example.