

Assignment:-
Optional vs NULL

- 1) Which option describes a true advantage of Optional class?
 - a) It can convert a NullPointerException into a NoSuchElementException
 - b) It makes the code easier to read.
 - c) As the return type of a method, it allows you to deal explicitly with the possibility of an empty result.
 - d) It allows you to check for nulls using more readable and concise methods.
- 2) Which method from Optional allows you to chain many Optional instances?
 - a) of
 - b) map
 - c) flatMap
 - d) orElse

- 3) In the following piece of code, why is flatmap used instead of map?

```
public String getCarInsuranceName(Optional<Person> person) {  
    return person.flatMap(Person::getCar)  
                  .flatMap(Car::getInsurance)  
                  .map(Insurance::getName)  
                  .orElse("Unknown");  
}
```

A default value if the resulting Optional is empty

- 4) Why should Optionals not be used as fields in DTOs(Data transfer Objects)?
- 5) Is optional always a better choice than null?
- 6) Select the correct statement(s):
 1. Optional objects are non serializable.
 2. Heap size decreases by the virtue of using optional.
 3. Optional objects can be null.
- 7) Can you run methods on empty optional?