Assignment No - 5

Title

Design and develop a context for given case study and implement an interface for vehicles. Consider the example of vehicles like bicycle, car and bike. All vehicles have common functionalities such as Gear Change, Speed up and apply breaks, make an interface and put all these common functionalities. Bicycle, Bike, car classes should be implemented for all these functionalities in their own class in their own way.

Theory.

An interface in Java is a blueprint of class. It has static constants and abstract methods. The interface in Java is a mechanism to achieve abstraction. There can be only abstract method in the Java interface, not method body. It is used achieve abstraction and multiple inheritance in Java.

By interface, we can support the functionality of multiple inheritance.

It can be used to achieve loose coupling

Syntax

```
interface < interface-name> {

    // declare constant Fields
    // declare methods that abstract
    // by default.
}
```

Example:

In this example, the printable interface has only one method, and its implementation is provided in the A class.

```
interface printable {
    void print ();
}

class A implements printable {
    public void print ()
    { System.out.println ("Hellow");
    public static void main (String args[]) {
    A obj = new A ();
    obj. print (); } }
```

Conclusion

Hence we have successfully implemented the Java Interface program.