

Practical No. 5

```
package Prac5;

import java.util.Scanner;

interface Vehicle
{
    abstract void gearChange(int a);
    abstract void applyBreak(int a);
    abstract void speedUp(int a);
}

class Bicycle implements Vehicle
{
    public void gearChange(int gear)
    {
        System.out.println("Gear Number : "+gear);
    }

    public void applyBreak(int bre)
    {
        if(bre == 1) {
            System.out.println("Break Applied!!!");
        }
        else {
            System.out.println("Break Not Applied!!!");
        }
    }

    public void speedUp(int speed)
    {
        System.out.println("Bicycle speed is : "+speed);
    }
}

class Cycle implements Vehicle
{
    public void gearChange(int gear)
    {
        System.out.println("Gear Number : "+gear);
    }

    public void applyBreak(int bre)
    {
        if(bre == 1) {
            System.out.println("Break Applied!!!");
        }
        else {
            System.out.println("Break Not Applied!!!");
        }
    }

    public void speedUp(int speed)
    {
        System.out.println("Bicycle speed is : "+speed);
    }
}

class Car implements Vehicle
{
    public void gearChange(int gear)
    {
```

```

        System.out.println("Gear Number : "+gear);
    }

    public void applyBreak(int bre)
    {
        if(bre == 1) {
            System.out.println("Break Applied!!!");
        }
        else {
            System.out.println("Break Not Applied!!!");
        }
    }

    public void speedUp(int speed)
    {
        System.out.println("Bicycle speed is : "+speed);
    }
}

class Inter_Vehicle
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        int ch;

        do
        {
            System.out.println("\nStatus of
Vehicle\n1.Bicycle\n2.Cycle\n3.Car");
            System.out.println("Enter your choice : ");
            ch = sc.nextInt();
            System.out.println("\n");

            switch(ch)
            {
                case 1:
                    Bicycle b = new Bicycle();
                    b.gearChange(1);
                    b.speedUp(30);
                    b.applyBreak(1);
                    break;

                case 2:
                    Cycle c = new Cycle();
                    c.gearChange(1);
                    c.speedUp(20);
                    c.applyBreak(1);
                    break;

                case 3:
                    Car ca = new Car();
                    ca.gearChange(2);
                    ca.speedUp(50);
                    ca.applyBreak(0);
                    break;

                case 4:
                    break;
            }
        }while(ch<4);
    }
}

```

```
    }  
}
```

OUTPUT :

```
Status of Vehicle  
1.Bicycle  
2.Cycle  
3.Car  
Enter your choice :  
1
```

```
Gear Number : 1  
Bicycle speed is : 30  
Break Applied!!!
```

```
Status of Vehicle  
1.Bicycle  
2.Cycle  
3.Car  
Enter your choice :  
2
```

```
Gear Number : 1  
Bicycle speed is : 20  
Break Applied!!!
```

```
Status of Vehicle  
1.Bicycle  
2.Cycle  
3.Car  
Enter your choice :  
3
```

```
Gear Number : 2  
Bicycle speed is : 50  
Break Not Applied!!!
```

```
Status of Vehicle  
1.Bicycle  
2.Cycle  
3.Car  
Enter your choice :  
4
```