

```

class ParkingLotFeeManagement {

    int totalParkingSpaces = 2;

    public int trunkParkingFeeCalculator(Trunk trunk) {

        int fee = trunk.getHours() * 10;

        if (fee > 120)
            return 120;
        else
            return fee;
    }

    public int carParkingFeeCalculator(Car car) {
        int fee = car.getHours() * 5;

        if (fee > 60)
            return 60;
        else
            return fee;
    }

    public void setCarParkingHours(Car car, int hours) throws Exception {
        if (isAvailable()) {
            car.setHours(hours);
            totalParkingSpaces--;
        } else {
            throw new Exception("no more parking space");
        }
    }

    public void setTrunkParkingHours(Trunk trunk, int hours) throws Exception {
        if(isAvailable()) {
            trunk.setHours(hours);
            totalParkingSpaces--;
        } else
            throw new Exception("no more parking space");
    }

    public void remove(Model model) {
        model.setHours(0);
        totalParkingSpaces++;
    }

    public boolean isAvailable() {
        return totalParkingSpaces >= 1;
    }
}

abstract class Model {
    int hours;

    public abstract int getHours();
}

```

```
    public abstract void setHours(int hours);  
}
```

```
class Car extends Model{
```

```
    public Car(){  
    public Car(int hours) {  
        this.hours = hours;  
    }  
}
```

```
    @Override  
    public int getHours() {  
        return hours;  
    }  
}
```

```
    @Override  
    public void setHours(int hours) {  
        this.hours = hours;  
    }  
}
```

```
}
```

```
class Trunk extends Model {
```

```
    public Trunk(){  
    public Trunk(int hours) {  
        this.hours = hours;  
    }  
}
```

```
    @Override  
    public int getHours() {  
        return hours;  
    }  
}
```

```
    @Override  
    public void setHours(int hours) {  
        this.hours = hours;  
    }  
}
```

```
}
```

```
public class SystemDotOutDotPrintInTest {
```

```
    public static void main(String args[]) throws Exception {  
        Trunk trunk1 = new Trunk(0); // before entering the parking lot  
        Car car1 = new Car(0); // before entering the parking lot
```

```
        ParkingLotFeeManagement feeManagement = new ParkingLotFeeManagement();
```

```
        // after entering the parking lot  
        feeManagement.setTrunkParkingHours(trunk1, 5);  
        // about exiting the parking lot  
        System.out.println(feeManagement.trunkParkingFeeCalculator(trunk1));
```

```
        feeManagement.setCarParkingHours(car1, 10);
```

```
        System.out.println(feeManagement.carParkingFeeCalculator(car1));  
        feeManagement.remove(trunk1);  
        feeManagement.remove(car1);  
    }  
}
```