

## Exercise 6

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Before submit your code, you have to MERGE your codes ( `ArmorClass.java` , `Ex6Console.java` , `Interface.java` ) into `Ex6Console.java` .

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### Merging example

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#### Before merge

##### 1. `ArmorClass.java`

```
class IronmanRepulsor {...}
.
```

##### 2. `Interface.java`

```
interface Repulsor {...}
.
```

##### 3. `Ex6Console.java`

```
public class Ex6Console {...}
```

#### After merge

##### `Ex6Console.java`

```
class IronmanRepulsor {...}
interface Repulsor {...}
.
.
.
public class Ex6Console {...}
```

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## Card Game Simulator

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- This exercise has skeleton code.
- You have to implement 6 classes
  - `class IronmanRepulsor`
  - `class IronmanFireBlaster`
  - `class IronmanWhipFlash`
  - `class IronmanRepulsorFireBlaster`
  - `class IronmanRepulsorWhipFlash`
  - `class IronmanHulkBuster`
- The program must follow the constraints below.

### Program description

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- You are going to implement a turn based mini card game.
- To win the game, you have to make your enemy health to 0.
- If your health becomes 0 before enemy, you lose.

- You can choose one action : summon one armor, or make your armors deal enemy.
- After each action, enemy damages your armors or if there is no armor in field, enemy damages yourself.
- When printing each classes, you should print its armor type with it.
  - `name[health]_ArmorType[type]`
  - `name[health]_ArmorType[type1][type2]`
- **All codes are already implemented**, except file `ArmorClasses.java`
- You have to implement 6 classes in `ArmorClasses.java`
  - All classes should inherit `class Ironman`
  - Each classes should implement necessary interfaces

## Armor description

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- **Basic**
  - **Basic** armor have 50 health
  - **Basic** armor damages 5 to enemy
  - It is already implemented as `class IronMan`
- **Repulsor**
  - **Repulsor** armor have no bonus health
  - **Repulsor** armor damages 5 more to enemy
- **Fire Blaster**
  - **Fire Blaster** armor have no bonus health
  - **Fire Blaster** armor damages 15 more to enemy
  - **Fire Blaster** armor damages 5 to armor itself every time it deals.
- **Whip Flash**
  - **Whip Flash** armor have 30 less health
  - **Whip Flash** armor damages 3 more to enemy
  - **Whip Flash** armor heals 3 of armor itself every time it deals.
- **Hulk Buster**
  - **Hulk Buster** armor have 50 more health
  - **Hulk Buster** armor damages 2 less to enemy
- When **Repulsor** and **Whip Flash** are used together
  - **Repulsor** can damage 5 more than usual.(total 10 more damage)
  - **Whip Flash** no longer heals armor itself every time it deals.
  - **Whip Flash** no longer have 30 less health.
- When **Repulsor** and **Fire Blaster** are used together
  - **Repulsor** can damage 10 more than usual.(total 15 more damage)
  - **Fire Blaster** damages 10 to armor itself every time it deals.

## Interface description

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- One of skeleton code contains interface and basic classes.

```

interface Repulsor {
    int repulsorDamage(); //have initial health +0 | deals additional 5 damage
}

interface FireBlaster {
    int fireBlasterDamage(); //have initial health +0 | deals additional 15 damage, but damaged 5 health
}

interface WhipFlash {
    int whipFlashDamage(); //have initial health -30 | deals additional 3 damage, and heals 3 health
}

interface HulkBuster {
    int hulkBusterDamage(); //have initial health +50 | deals additional -2 damage
}

class Ironman {
    protected String name;
    protected int health;

    public Ironman(String name) {
        this.name = name;
        setHealth();
    }

    public String getName() {
        return name;
    }

    public int deal() {
        return 5;
    }

    protected void setHealth() {
        this.health = 50;
    }

    public void damaged(int damage) {
        this.health -= damage;
    }

    public boolean isDead() {
        return health <= 0;
    }

    @Override
    public String toString() {
        return name + "[" + health + "]";
    }
}

```

- You have to implement `ArmorClasses.java` file using `extends` and `implements`