```java
package com.company;

public class Ninja {
    private String name;
    private int health;
    private int attackPoint;
    private int diceRollPoint;
    private final int maxPercentAttack = 100;
    private int minPercentAttack = 50;

    public Ninja(String name){
        this.name = name;
        health = 10;
        attackPoint = 1;
    }


    public int getHealth() {
        return health;
    }

    public void setHealth(int health) {
        this.health = health;
    }

    public int getAttackPoint() {
        return attackPoint;
    }

    public void setAttackPoint(int attackPoint) {
        this.attackPoint = attackPoint;
    }

    public int getDiceRollPoint() {
        return diceRollPoint;
    }
```

```java
37
38     public void setDiceRollPoint(int diceRollPoint) {
39         this.diceRollPoint = diceRollPoint;
40     }
41
42     public boolean Defense(){
43         int randomNumber = (int) ((Math.random() * maxPercentAttack-minPercentAttack+1) + minPercentAttack);
44         System.out.println(randomNumber);
45         return randomNumber > 50 ? true : false;
46     }
47
48     public void Attack(Ninja enemyNinja){
49         if (!enemyNinja.Defense()){
50             System.out.println("Successfull hit from "+enemyNinja.getName() + " by "+enemyNinja.getAttackPoint
   () + " hit");
51             enemyNinja.setHealth(enemyNinja.getHealth()-getAttackPoint());
52         }
53         else {
54             System.out.println("Missed , maybe next time "+enemyNinja.getName());
55         }
56
57
58     }
59
60     public String getName() {
61         return name;
62     }
63 }
64
```

```java
package com.company;

import java.util.List;

public class Dice {
    public void Roll(List<Ninja> ninjas){
        for(Ninja ninja : ninjas){
            int randomNumber = (int)Math.floor(Math.random()*(100)+1);
            ninja.setDiceRollPoint(randomNumber);
        }
    }
}
```

```java
package com.company;

import java.util.List;

public class PlayingArea {
    private List<Ninja> ninjas;
    private Dice dice;
    private int roundCount;

    public PlayingArea(List<Ninja> ninjas){
        this.ninjas = ninjas;
        this.dice = new Dice();
        roundCount = 1;
    }

    private boolean CheckIfAnyNinjaDead(List<Ninja> ninjas){
        for (Ninja ninja : ninjas){
            if (ninja.getHealth() <= 0)
                return false;
        }

        return true;
    }

    private Ninja CheckWhichNinjaIsDead(List<Ninja> ninjas){
        if (ninjas.get(0).getHealth() <= 0)
            return ninjas.get(0);
        else
            return ninjas.get(1);
    }


    private Ninja GetAttackingNinja(List<Ninja> ninjas){
        //it can be draw , or one winner
```

```java
37          if (ninjas.get(0).getDiceRollPoint() > ninjas.get(1).getDiceRollPoint())
38              return ninjas.get(0);
39          else if(ninjas.get(0).getDiceRollPoint() < ninjas.get(1).getDiceRollPoint())
40              return ninjas.get(1);
41          else
42              return null;
43      }



47      public void Fight() throws InterruptedException {

49          System.out.println("Let the fight begin ...");

51          Thread.sleep(3000);
52          System.out.println();

54          while(CheckIfAnyNinjaDead(ninjas)){
55              System.out.println("ROUND "+roundCount+ " FIGHT");
56              roundCount++;

58              Thread.sleep(3000);
59              System.out.println();

61              System.out.println("Rolling dice ...");
62              dice.Roll(ninjas);

64              Thread.sleep(3000);
65              System.out.println();

67              List<Ninja> tempArray = ninjas;



71              Ninja attackingNinja = GetAttackingNinja(ninjas);
72
```

```java
73              if (attackingNinja==null){
74                  System.out.println("This round is DRAW");
75                  System.out.println("------------------------------------------");
76                  Thread.sleep(3000);
77                  continue;
78              }
79
80              else{
81                  System.out.println("Attacking turn : " + attackingNinja.getName());
82                  tempArray.remove(attackingNinja);
83                  Ninja defendingNinja = tempArray.get(0);
84                  System.out.println("DEFEND YOURSELF , " + defendingNinja.getName());
85
86                  System.out.println();
87                  Thread.sleep(2000);
88
89                  tempArray.add(attackingNinja);
90
91                  attackingNinja.Attack(defendingNinja);
92                  Thread.sleep(3000);
93
94              }
95
96              System.out.println("---------------------------------------------");
97          }
98
99          Ninja deadNinja = CheckWhichNinjaIsDead(ninjas);
100         System.out.println("RIP to the "+deadNinja.getName());
101
102         Thread.sleep(2000);
103
104         ninjas.remove(deadNinja);
105         Ninja winnerNinja = ninjas.get(0);
106         System.out.println(winnerNinja.getName().toUpperCase()+" WINS");
107         System.out.println("FATALITY");
108
```

```
109        Thread.sleep(3000);
110    }
111 }
112
```

```java
package com.company;

import java.util.ArrayList;
import java.util.List;

public class Main {

    public static void main(String[] args) {
        Ninja ninja1 = new Ninja("Momochi Sandayu");
        Ninja ninja2 = new Ninja("Fuma Kotaro");

        List<Ninja> fightingNinjas = new ArrayList<Ninja>();
        fightingNinjas.add(ninja1);
        fightingNinjas.add(ninja2);

        PlayingArea playingArea = new PlayingArea(fightingNinjas);
        try {
            playingArea.Fight();
        } catch (InterruptedException e) {
            e.printStackTrace();
        }
    }
}
```

```
C:\Users\sahin\.jdks\openjdk-17\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2021.2.2\lib\
idea_rt.jar=55149:C:\Program Files\JetBrains\IntelliJ IDEA 2021.2.2\bin" -Dfile.encoding=UTF-8 -classpath C:\
Users\sahin\Desktop\NinjaAttackGame\out\production\NinjaAttackGame com.company.Main
Let the fight begin ...

ROUND 1 FIGHT

Rolling dice ...

Attacking turn : Fuma Kotaro
DEFEND YOURSELF , Momochi Sandayu

45
Successfull hit from Momochi Sandayu by 1 hit
----------------------------------------
ROUND 2 FIGHT

Rolling dice ...

Attacking turn : Momochi Sandayu
DEFEND YOURSELF , Fuma Kotaro

8
Successfull hit from Fuma Kotaro by 1 hit
----------------------------------------
ROUND 3 FIGHT

Rolling dice ...

Attacking turn : Fuma Kotaro
DEFEND YOURSELF , Momochi Sandayu

66
Missed , maybe next time Momochi Sandayu
----------------------------------------
ROUND 4 FIGHT
```

```
35
36 Rolling dice ...
37
38 Attacking turn : Fuma Kotaro
39 DEFEND YOURSELF , Momochi Sandayu
40
41 85
42 Missed , maybe next time Momochi Sandayu
43 ----------------------------------------------
44 ROUND 5 FIGHT
45
46 Rolling dice ...
47
48 Attacking turn : Fuma Kotaro
49 DEFEND YOURSELF , Momochi Sandayu
50
51 82
52 Missed , maybe next time Momochi Sandayu
53 ----------------------------------------------
54 ROUND 6 FIGHT
55
56 Rolling dice ...
57
58 Attacking turn : Momochi Sandayu
59 DEFEND YOURSELF , Fuma Kotaro
60
61 91
62 Missed , maybe next time Fuma Kotaro
63 ----------------------------------------------
64 ROUND 7 FIGHT
65
66 Rolling dice ...
67
68 Attacking turn : Momochi Sandayu
69 DEFEND YOURSELF , Fuma Kotaro
70
```

```
 71 97
 72 Missed , maybe next time Fuma Kotaro
 73 ----------------------------------------
 74 ROUND 8 FIGHT
 75
 76 Rolling dice ...
 77
 78 Attacking turn : Fuma Kotaro
 79 DEFEND YOURSELF , Momochi Sandayu
 80
 81 44
 82 Successfull hit from Momochi Sandayu by 1 hit
 83 ----------------------------------------
 84 ROUND 9 FIGHT
 85
 86 Rolling dice ...
 87
 88 Attacking turn : Fuma Kotaro
 89 DEFEND YOURSELF , Momochi Sandayu
 90
 91 66
 92 Missed , maybe next time Momochi Sandayu
 93 ----------------------------------------
 94 ROUND 10 FIGHT
 95
 96 Rolling dice ...
 97
 98 Attacking turn : Fuma Kotaro
 99 DEFEND YOURSELF , Momochi Sandayu
100
101 32
102 Successfull hit from Momochi Sandayu by 1 hit
103 ----------------------------------------
104 ROUND 11 FIGHT
105
106 Rolling dice ...
```

```
107
108 Attacking turn : Fuma Kotaro
109 DEFEND YOURSELF , Momochi Sandayu
110
111 72
112 Missed , maybe next time Momochi Sandayu
113 -----------------------------------------
114 ROUND 12 FIGHT
115
116 Rolling dice ...
117
118 Attacking turn : Momochi Sandayu
119 DEFEND YOURSELF , Fuma Kotaro
120
121 86
122 Missed , maybe next time Fuma Kotaro
123 -----------------------------------------
124 ROUND 13 FIGHT
125
126 Rolling dice ...
127
128 Attacking turn : Momochi Sandayu
129 DEFEND YOURSELF , Fuma Kotaro
130
131 11
132 Successfull hit from Fuma Kotaro by 1 hit
133 -----------------------------------------
134 ROUND 14 FIGHT
135
136 Rolling dice ...
137
138 Attacking turn : Fuma Kotaro
139 DEFEND YOURSELF , Momochi Sandayu
140
141 92
142 Missed , maybe next time Momochi Sandayu
```

```
143 ----------------------------------------
144 ROUND 15 FIGHT
145
146 Rolling dice ...
147
148 Attacking turn : Momochi Sandayu
149 DEFEND YOURSELF , Fuma Kotaro
150
151 96
152 Missed , maybe next time Fuma Kotaro
153 ----------------------------------------
154 ROUND 16 FIGHT
155
156 Rolling dice ...
157
158 Attacking turn : Momochi Sandayu
159 DEFEND YOURSELF , Fuma Kotaro
160
161 15
162 Successfull hit from Fuma Kotaro by 1 hit
163 ----------------------------------------
164 ROUND 17 FIGHT
165
166 Rolling dice ...
167
168 Attacking turn : Momochi Sandayu
169 DEFEND YOURSELF , Fuma Kotaro
170
171 17
172 Successfull hit from Fuma Kotaro by 1 hit
173 ----------------------------------------
174 ROUND 18 FIGHT
175
176 Rolling dice ...
177
178 Attacking turn : Fuma Kotaro
```

```
179 DEFEND YOURSELF , Momochi Sandayu
180
181 92
182 Missed , maybe next time Momochi Sandayu
183 ----------------------------------------
184 ROUND 19 FIGHT
185
186 Rolling dice ...
187
188 Attacking turn : Momochi Sandayu
189 DEFEND YOURSELF , Fuma Kotaro
190
191 94
192 Missed , maybe next time Fuma Kotaro
193 ----------------------------------------
194 ROUND 20 FIGHT
195
196 Rolling dice ...
197
198 Attacking turn : Momochi Sandayu
199 DEFEND YOURSELF , Fuma Kotaro
200
201 73
202 Missed , maybe next time Fuma Kotaro
203 ----------------------------------------
204 ROUND 21 FIGHT
205
206 Rolling dice ...
207
208 Attacking turn : Fuma Kotaro
209 DEFEND YOURSELF , Momochi Sandayu
210
211 75
212 Missed , maybe next time Momochi Sandayu
213 ----------------------------------------
214 ROUND 22 FIGHT
```

```
215
216 Rolling dice ...
217
218 Attacking turn : Momochi Sandayu
219 DEFEND YOURSELF , Fuma Kotaro
220
221 42
222 Successfull hit from Fuma Kotaro by 1 hit
223 ----------------------------------------
224 ROUND 23 FIGHT
225
226 Rolling dice ...
227
228 Attacking turn : Fuma Kotaro
229 DEFEND YOURSELF , Momochi Sandayu
230
231 4
232 Successfull hit from Momochi Sandayu by 1 hit
233 ----------------------------------------
234 ROUND 24 FIGHT
235
236 Rolling dice ...
237
238 Attacking turn : Fuma Kotaro
239 DEFEND YOURSELF , Momochi Sandayu
240
241 3
242 Successfull hit from Momochi Sandayu by 1 hit
243 ----------------------------------------
244 ROUND 25 FIGHT
245
246 Rolling dice ...
247
248 Attacking turn : Momochi Sandayu
249 DEFEND YOURSELF , Fuma Kotaro
250
```

```
251 52
252 Missed , maybe next time Fuma Kotaro
253 ----------------------------------------
254 ROUND 26 FIGHT
255
256 Rolling dice ...
257
258 Attacking turn : Fuma Kotaro
259 DEFEND YOURSELF , Momochi Sandayu
260
261 17
262 Successfull hit from Momochi Sandayu by 1 hit
263 ----------------------------------------
264 ROUND 27 FIGHT
265
266 Rolling dice ...
267
268 Attacking turn : Momochi Sandayu
269 DEFEND YOURSELF , Fuma Kotaro
270
271 76
272 Missed , maybe next time Fuma Kotaro
273 ----------------------------------------
274 ROUND 28 FIGHT
275
276 Rolling dice ...
277
278 Attacking turn : Momochi Sandayu
279 DEFEND YOURSELF , Fuma Kotaro
280
281 34
282 Successfull hit from Fuma Kotaro by 1 hit
283 ----------------------------------------
284 ROUND 29 FIGHT
285
286 Rolling dice ...
```

```
287
288 Attacking turn : Fuma Kotaro
289 DEFEND YOURSELF , Momochi Sandayu
290
291 6
292 Successfull hit from Momochi Sandayu by 1 hit
293 ----------------------------------------
294 ROUND 30 FIGHT
295
296 Rolling dice ...
297
298 Attacking turn : Momochi Sandayu
299 DEFEND YOURSELF , Fuma Kotaro
300
301 95
302 Missed , maybe next time Fuma Kotaro
303 ----------------------------------------
304 ROUND 31 FIGHT
305
306 Rolling dice ...
307
308 Attacking turn : Momochi Sandayu
309 DEFEND YOURSELF , Fuma Kotaro
310
311 38
312 Successfull hit from Fuma Kotaro by 1 hit
313 ----------------------------------------
314 ROUND 32 FIGHT
315
316 Rolling dice ...
317
318 Attacking turn : Momochi Sandayu
319 DEFEND YOURSELF , Fuma Kotaro
320
321 87
322 Missed , maybe next time Fuma Kotaro
```

```
323 ----------------------------------------
324 ROUND 33 FIGHT
325
326 Rolling dice ...
327
328 Attacking turn : Fuma Kotaro
329 DEFEND YOURSELF , Momochi Sandayu
330
331 85
332 Missed , maybe next time Momochi Sandayu
333 ----------------------------------------
334 ROUND 34 FIGHT
335
336 Rolling dice ...
337
338 Attacking turn : Fuma Kotaro
339 DEFEND YOURSELF , Momochi Sandayu
340
341 68
342 Missed , maybe next time Momochi Sandayu
343 ----------------------------------------
344 ROUND 35 FIGHT
345
346 Rolling dice ...
347
348 Attacking turn : Momochi Sandayu
349 DEFEND YOURSELF , Fuma Kotaro
350
351 82
352 Missed , maybe next time Fuma Kotaro
353 ----------------------------------------
354 ROUND 36 FIGHT
355
356 Rolling dice ...
357
358 Attacking turn : Fuma Kotaro
```

```
359 DEFEND YOURSELF , Momochi Sandayu
360
361 48
362 Successfull hit from Momochi Sandayu by 1 hit
363 ----------------------------------------
364 ROUND 37 FIGHT
365
366 Rolling dice ...
367
368 Attacking turn : Momochi Sandayu
369 DEFEND YOURSELF , Fuma Kotaro
370
371 60
372 Missed , maybe next time Fuma Kotaro
373 ----------------------------------------
374 ROUND 38 FIGHT
375
376 Rolling dice ...
377
378 Attacking turn : Fuma Kotaro
379 DEFEND YOURSELF , Momochi Sandayu
380
381 97
382 Missed , maybe next time Momochi Sandayu
383 ----------------------------------------
384 ROUND 39 FIGHT
385
386 Rolling dice ...
387
388 Attacking turn : Momochi Sandayu
389 DEFEND YOURSELF , Fuma Kotaro
390
391 85
392 Missed , maybe next time Fuma Kotaro
393 ----------------------------------------
394 ROUND 40 FIGHT
```

```
395
396 Rolling dice ...
397
398 Attacking turn : Momochi Sandayu
399 DEFEND YOURSELF , Fuma Kotaro
400
401 45
402 Successfull hit from Fuma Kotaro by 1 hit
403 ----------------------------------------
404 ROUND 41 FIGHT
405
406 Rolling dice ...
407
408 Attacking turn : Momochi Sandayu
409 DEFEND YOURSELF , Fuma Kotaro
410
411 6
412 Successfull hit from Fuma Kotaro by 1 hit
413 ----------------------------------------
414 ROUND 42 FIGHT
415
416 Rolling dice ...
417
418 Attacking turn : Momochi Sandayu
419 DEFEND YOURSELF , Fuma Kotaro
420
421 15
422 Successfull hit from Fuma Kotaro by 1 hit
423 ----------------------------------------
424 RIP to the Fuma Kotaro
425 MOMOCHI SANDAYU WINS
426 FATALITY
427
428 Process finished with exit code 0
429
```

Source

[BachelorDegreeOOPLesson/Week4/NinjaAttackGame at main · sahinmaral/BachelorDegreeOOPLesson (github.com)](#)