



# **Praktikum Pemrograman Berorientasi Objek**

**INF2153/B**

kelompok 27 :

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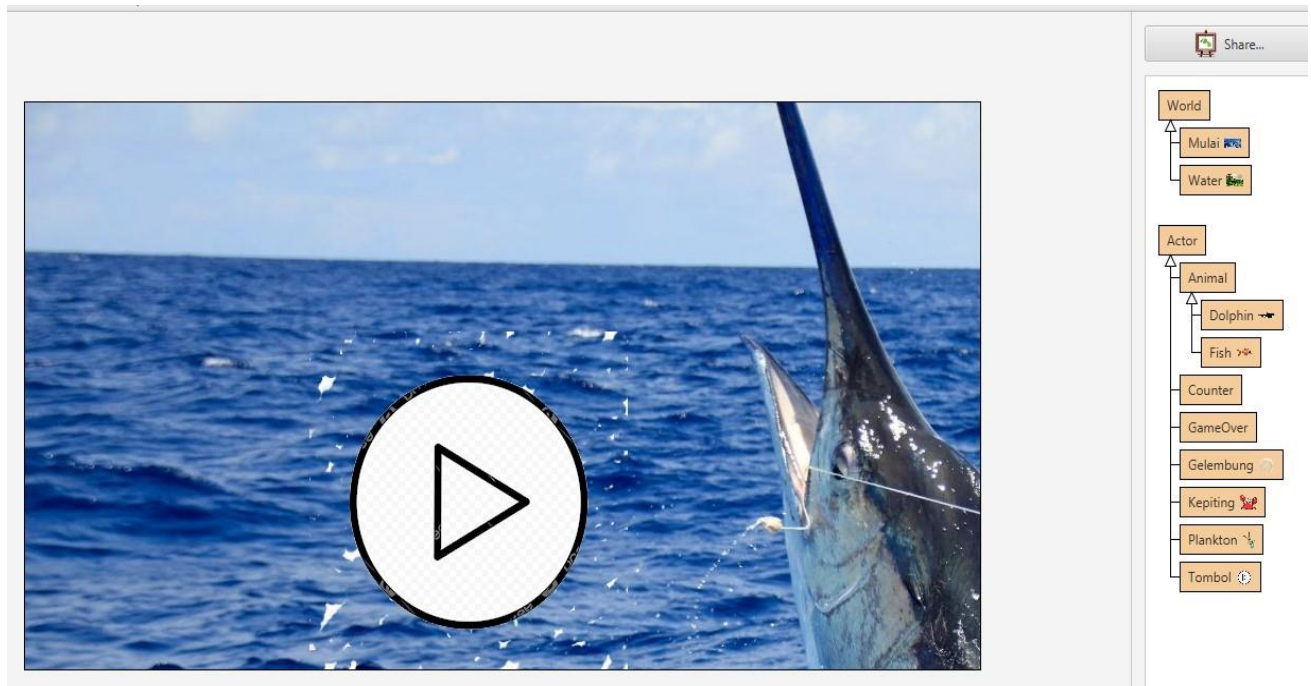
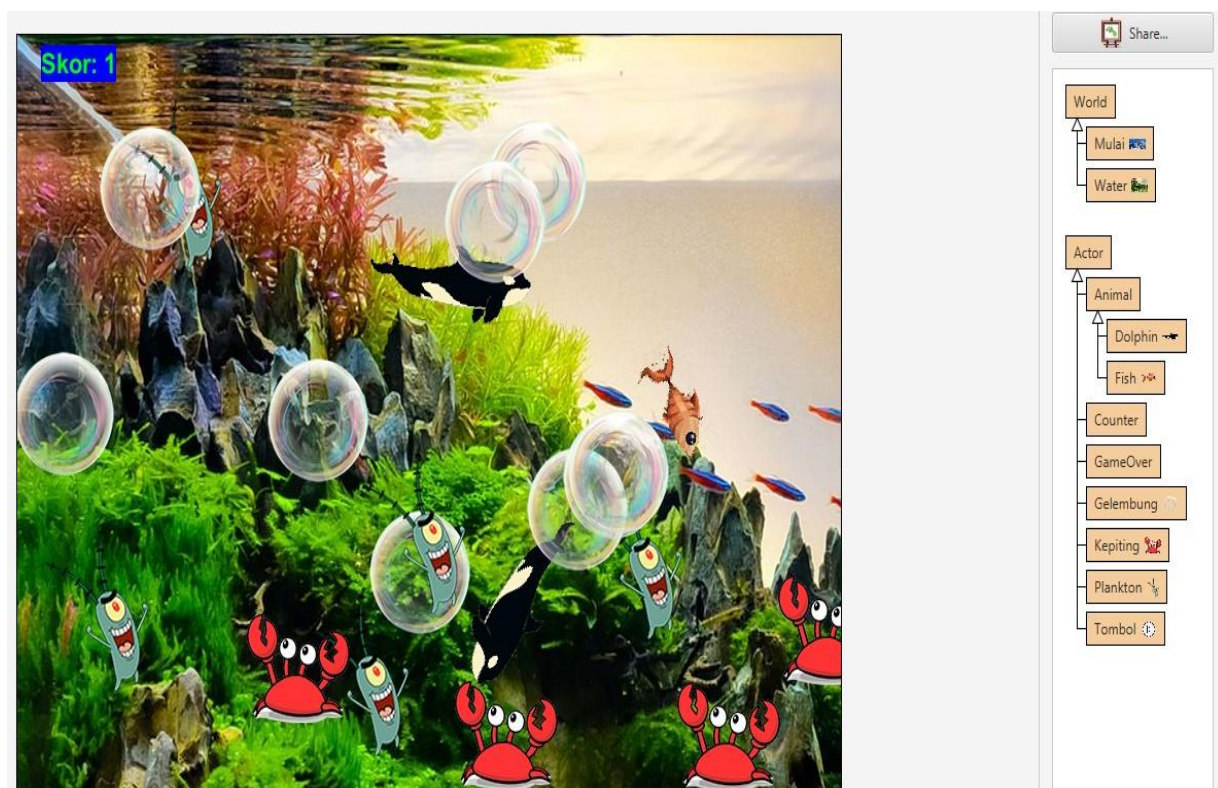


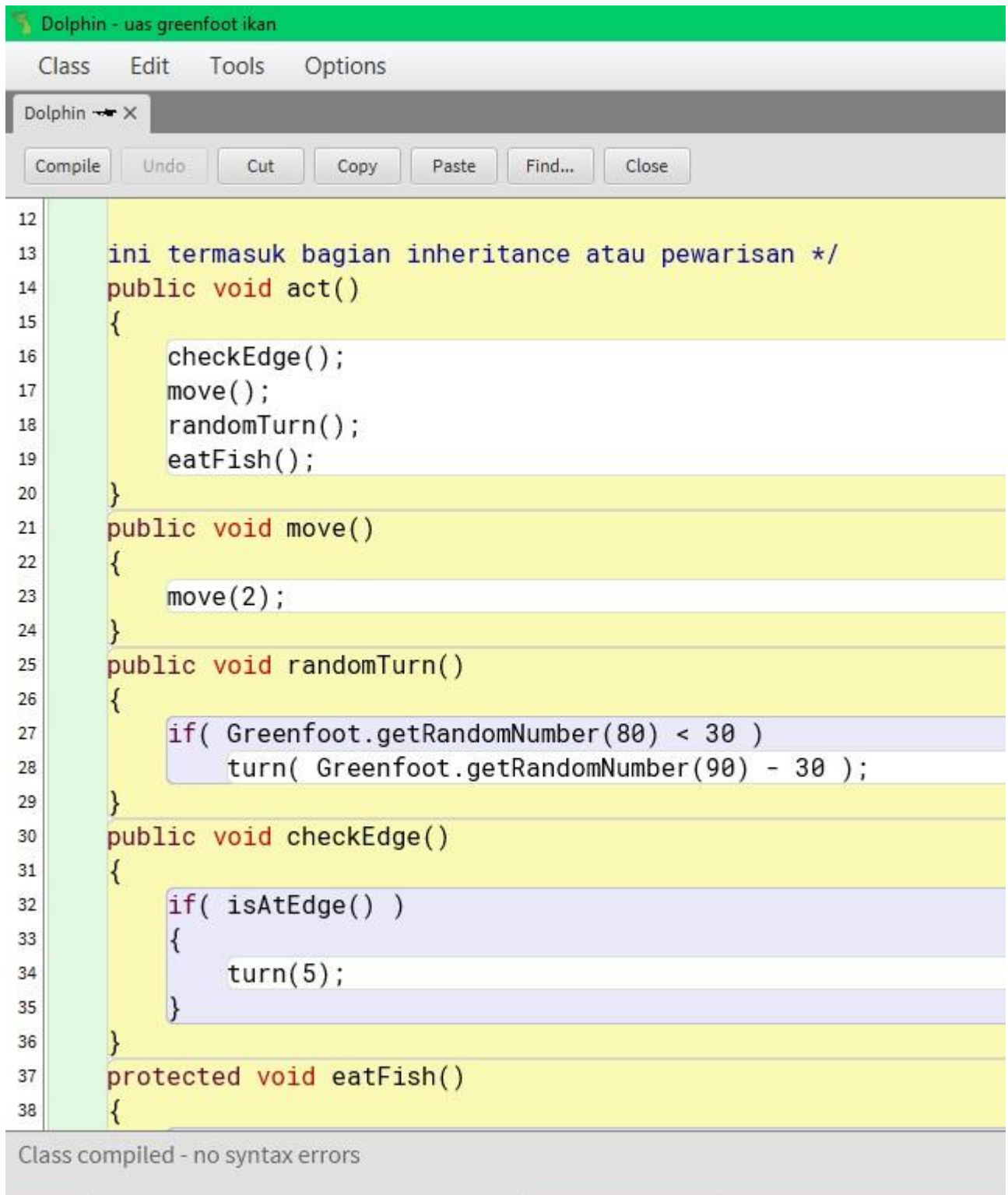
Foto diatas adalah tampilan menu awal permainan yg dibuat.



Permainan greenfoot ini sedikit mirip dengan permainan jadul “Feeding Frenzy”. Objek utama **ikan** memakan pada permainan ini memakan objek **plankton** yang akan menambah skor sebanyak 1 poin, tetapi jika tertabrak objek **Paus Pembunuh** maka permainan berakhir.

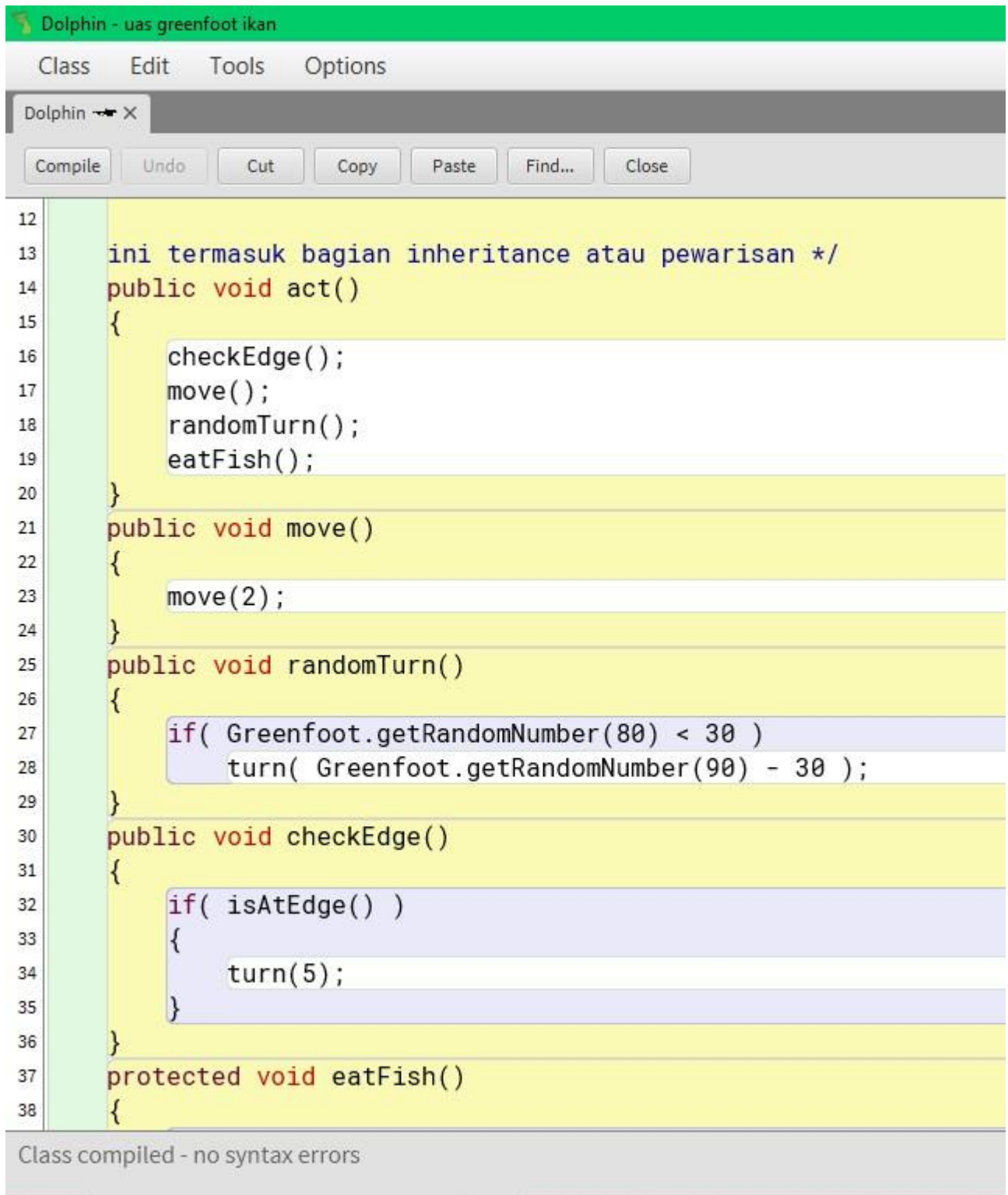
Permainan demo greenfoot ini memiliki objek yang bergerak, seperti gambar **gelembung**, dan gambar **kepiting merah**.

Permainan ini juga menggunakan musik latarbelakang



```
12
13 ini termasuk bagian inheritance atau pewarisan */
14 public void act()
15 {
16     checkEdge();
17     move();
18     randomTurn();
19     eatFish();
20 }
21 public void move()
22 {
23     move(2);
24 }
25 public void randomTurn()
26 {
27     if( Greenfoot.getRandomNumber(80) < 30 )
28         turn( Greenfoot.getRandomNumber(90) - 30 );
29 }
30 public void checkEdge()
31 {
32     if( isAtEdge() )
33     {
34         turn(5);
35     }
36 }
37 protected void eatFish()
38 {
```

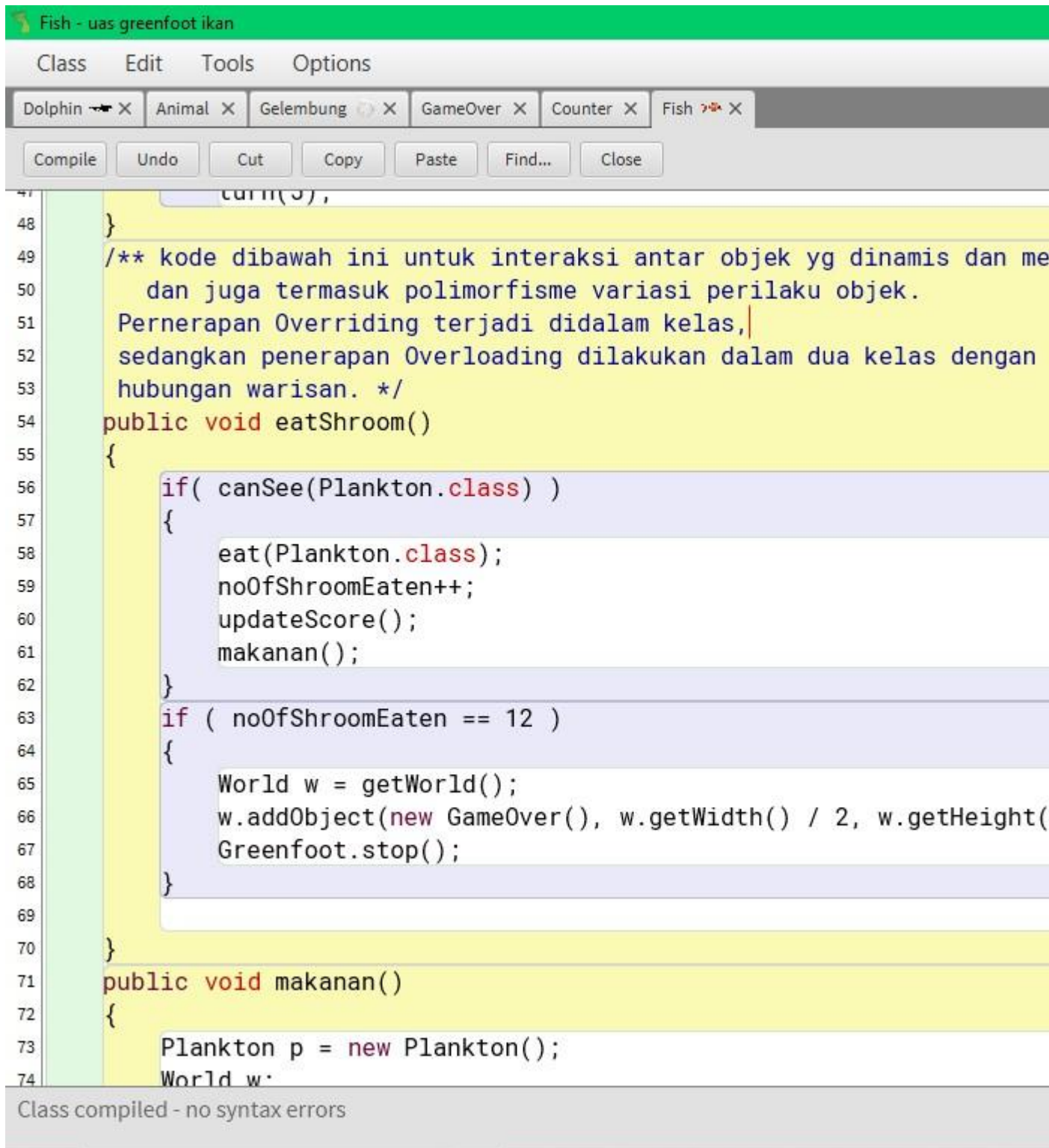
Class compiled - no syntax errors



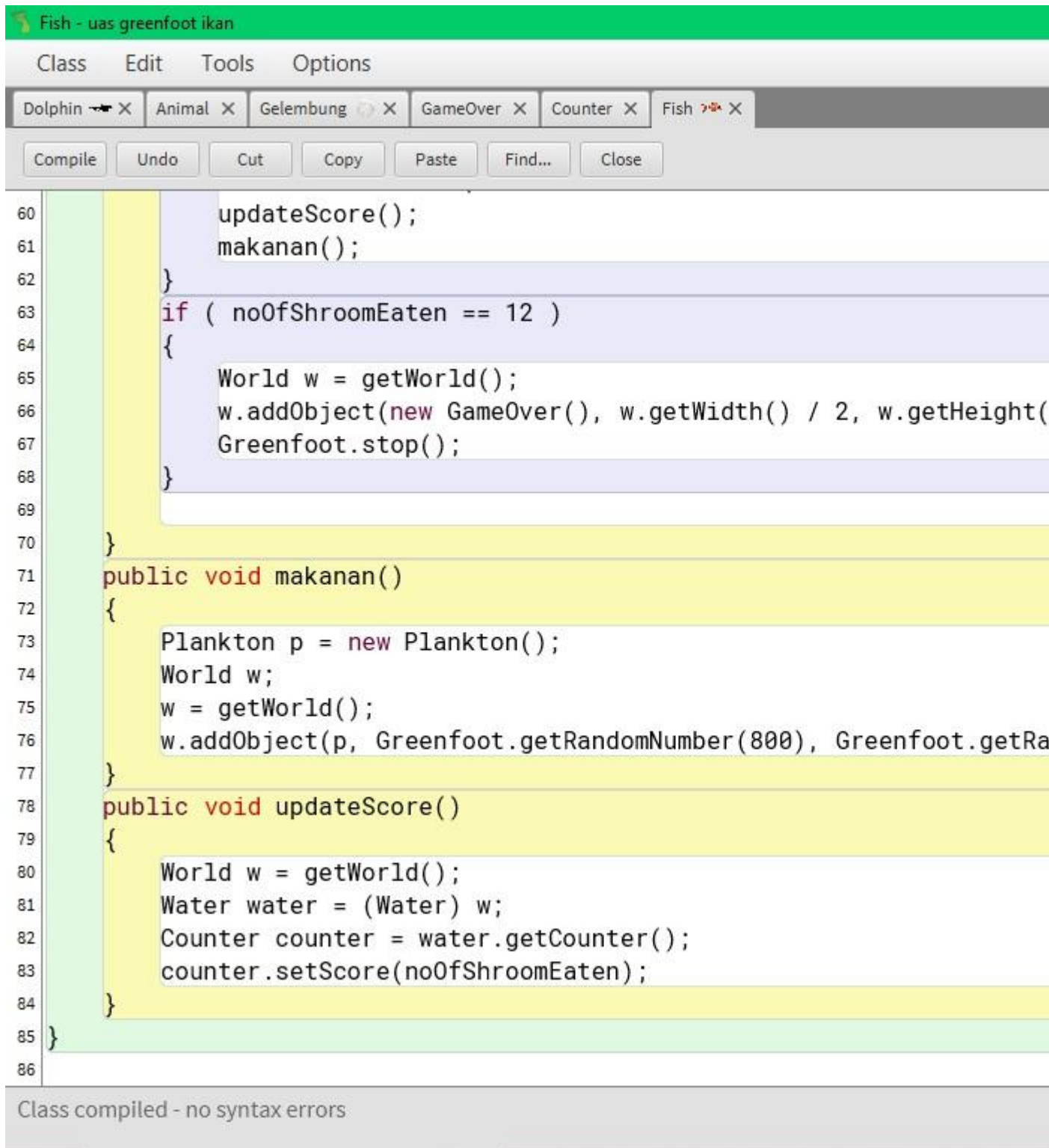
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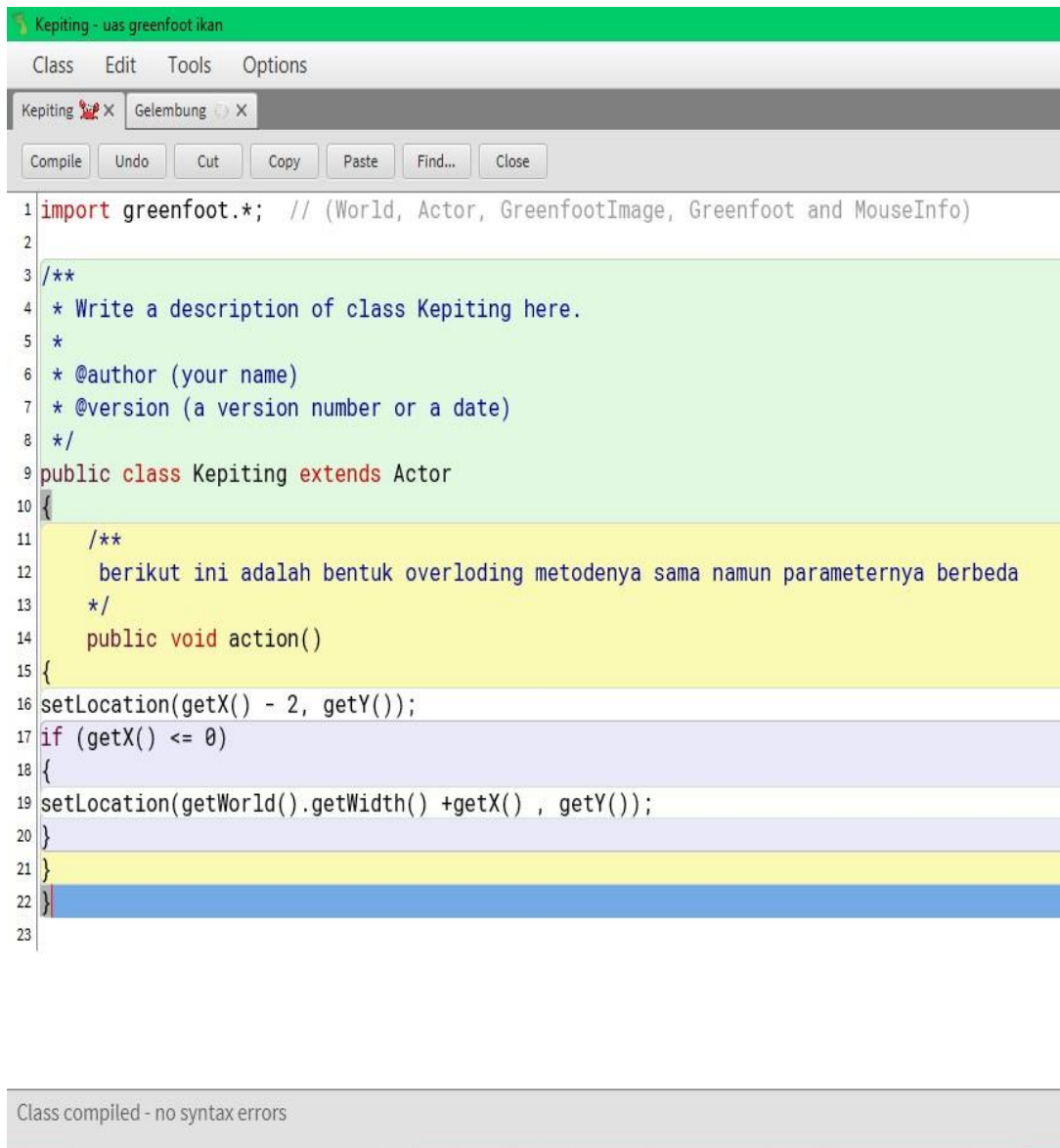


```
Fish - uas greenfoot ikan
Class Edit Tools Options
Dolphin X Animal X Gelembung X GameOver X Counter X Fish X
Compile Undo Cut Copy Paste Find... Close
47      turn(5),
48  }
49  /** kode dibawah ini untuk interaksi antar objek yg dinamis dan me
50      dan juga termasuk polimorfisme variasi perilaku objek.
51      Penerapan Overriding terjadi didalam kelas,
52      sedangkan penerapan Overloading dilakukan dalam dua kelas dengan
53      hubungan warisan. */
54  public void eatShroom()
55  {
56      if( canSee(Plankton.class) )
57      {
58          eat(Plankton.class);
59          noOfShroomEaten++;
60          updateScore();
61          makanan();
62      }
63      if ( noOfShroomEaten == 12 )
64      {
65          World w = getWorld();
66          w.addObject(new GameOver(), w.getWidth() / 2, w.getHeight()
67          Greenfoot.stop());
68      }
69  }
70  }
71  public void makan()
72  {
73      Plankton p = new Plankton();
74      World w
Class compiled - no syntax errors
```



```
60         updateScore();
61         makanan();
62     }
63     if ( noOfShroomEaten == 12 )
64     {
65         World w = getWorld();
66         w.addObject(new GameOver(), w.getWidth() / 2, w.getHeight() / 2);
67         Greenfoot.stop();
68     }
69 }
70
71 public void makanan()
72 {
73     Plankton p = new Plankton();
74     World w;
75     w = getWorld();
76     w.addObject(p, Greenfoot.getRandomNumber(800), Greenfoot.getRandomNumber(800));
77 }
78 public void updateScore()
79 {
80     World w = getWorld();
81     Water water = (Water) w;
82     Counter counter = water.getCounter();
83     counter.setScore(noOfShroomEaten);
84 }
85 }
86
```

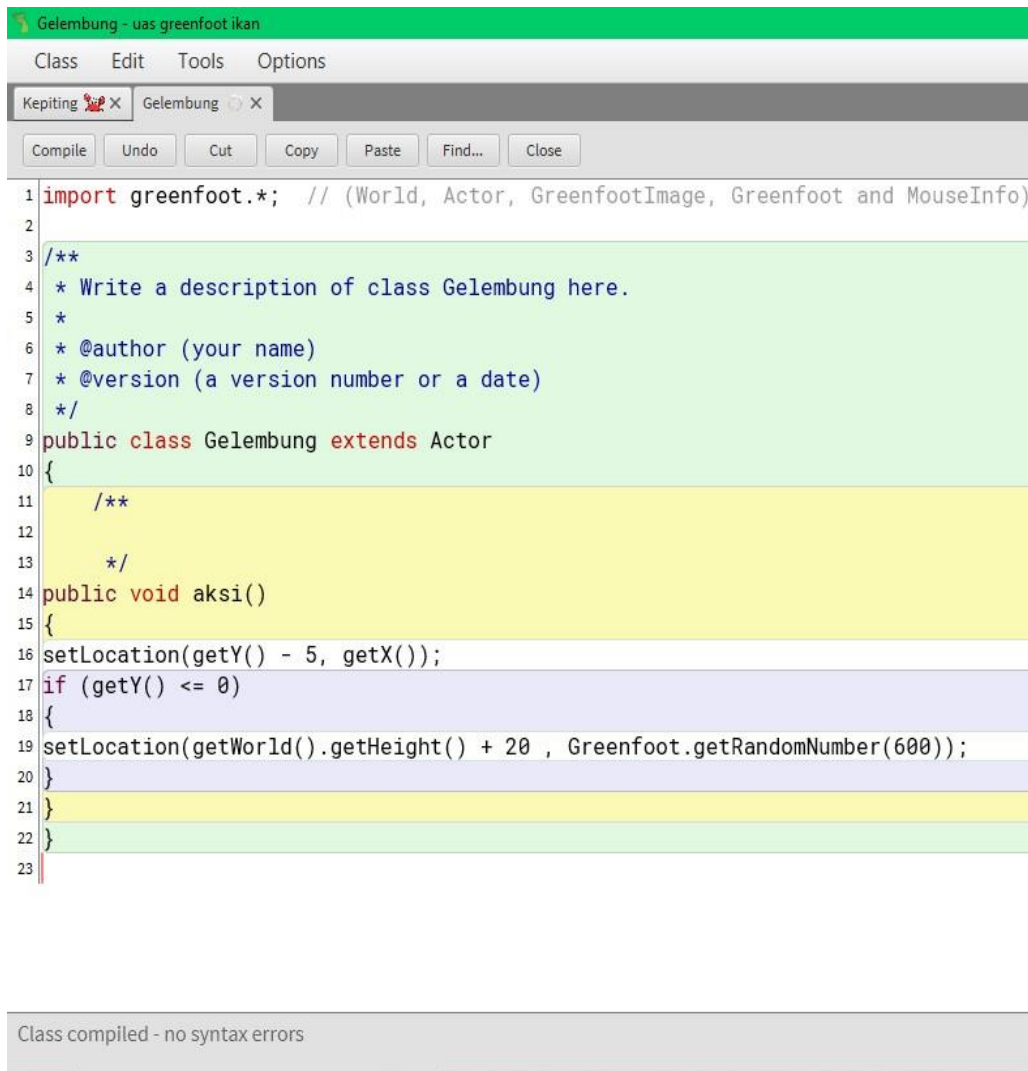
Class compiled - no syntax errors



```
1 import greenfoot.*; // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)
2
3 /**
4  * Write a description of class Kepiting here.
5  *
6  * @author (your name)
7  * @version (a version number or a date)
8  */
9 public class Kepiting extends Actor
10 {
11     /**
12      * berikut ini adalah bentuk overloading metodenya sama namun parameternya berbeda
13      */
14     public void action()
15     {
16         setLocation(getX() - 2, getY());
17         if (getX() <= 0)
18         {
19             setLocation(getWorld().getWidth() + getX() , getY());
20         }
21     }
22 }
23
```

Class compiled - no syntax errors





The screenshot shows the Greenfoot IDE interface. The title bar reads "Gelembung - uas greenfoot ikan". The menu bar includes "Class", "Edit", "Tools", and "Options". The toolbar contains buttons for "Compile", "Undo", "Cut", "Copy", "Paste", "Find...", and "Close". The main editor window displays the code for the "Gelembung" class. The code is as follows:

```
1 import greenfoot.*; // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)
2
3 /**
4  * Write a description of class Gelembung here.
5  *
6  * @author (your name)
7  * @version (a version number or a date)
8  */
9 public class Gelembung extends Actor
10 {
11     /**
12
13     */
14     public void aksi()
15     {
16         setLocation(getY() - 5, getX());
17         if (getY() <= 0)
18         {
19             setLocation(getWorld().getHeight() + 20 , Greenfoot.getRandomNumber(600));
20         }
21     }
22 }
23
```

At the bottom of the IDE, a status bar indicates "Class compiled - no syntax errors".