



Praktikum Pemrograman Berorientasi Objek

INF2153

LAPORAN Project UAS : Membuat Game

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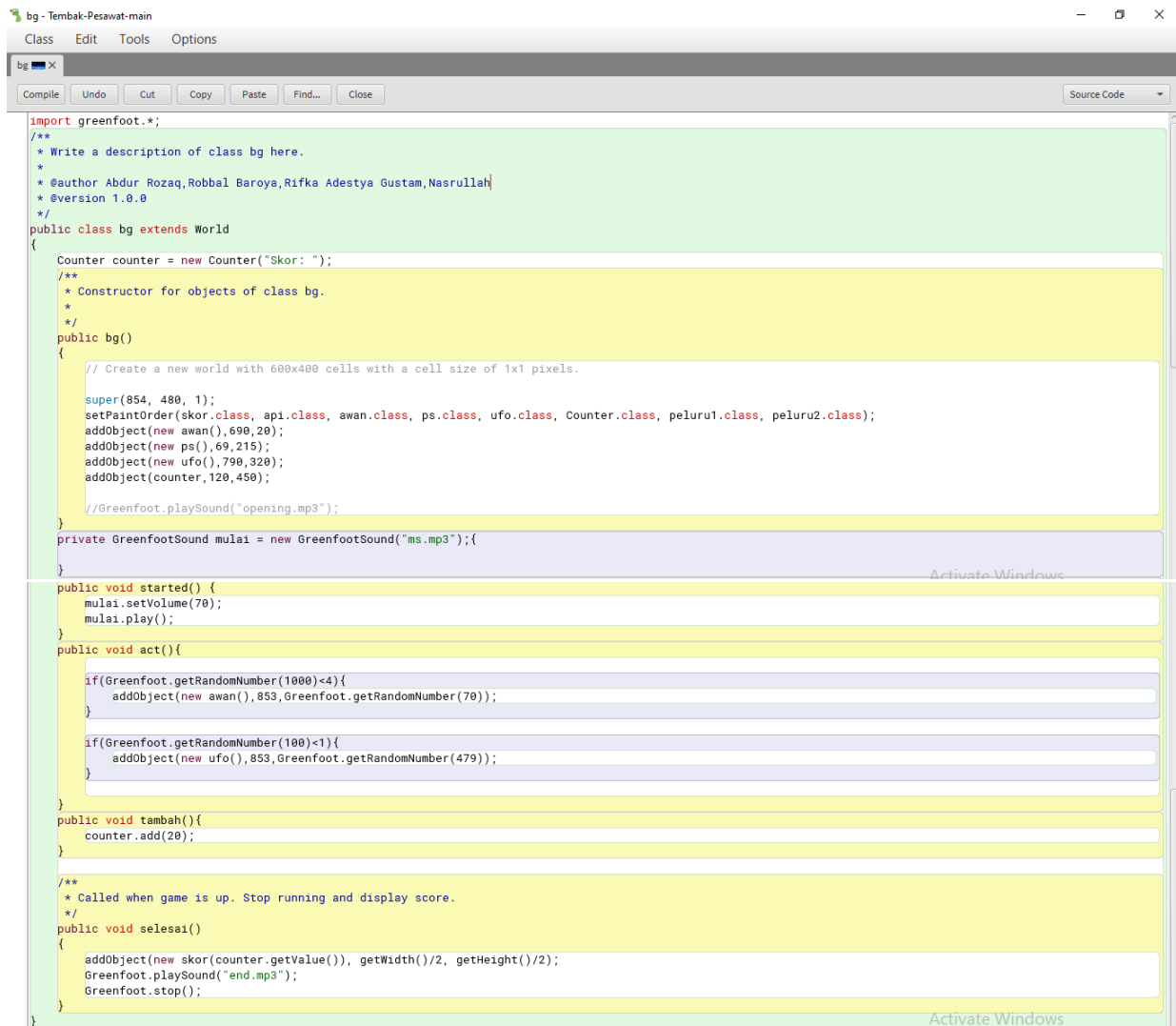
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➤ bg



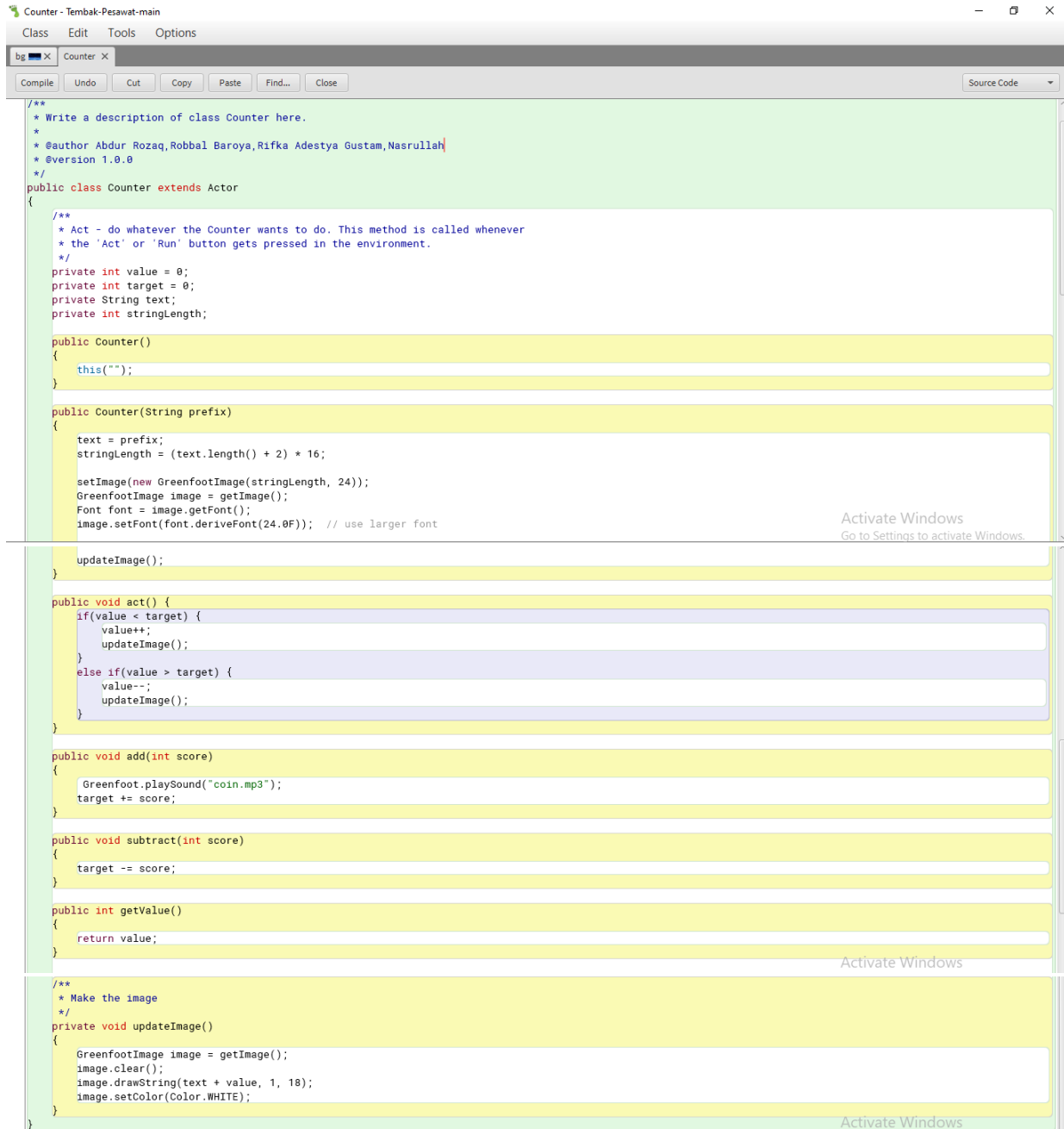
```
import greenfoot.*;

/**
 * Write a description of class bg here.
 *
 * @author Abdur Rozaq,Robbal Baroya,Rifka Adestya Gustam,Nasrullah
 * @version 1.0.0
 */
public class bg extends World
{
    Counter counter = new Counter("Skor: ");
    /**
     * Constructor for objects of class bg.
     */
    public bg()
    {
        // Create a new world with 600x400 cells with a cell size of 1x1 pixels.
        super(854, 480, 1);
        setPaintOrder(skor.class, api.class, awan.class, ps.class, ufo.class, Counter.class, peluru1.class, peluru2.class);
        addObject(new awan(), 690, 20);
        addObject(new ps(), 69, 215);
        addObject(new ufo(), 790, 320);
        addObject(counter, 120, 450);
        //Greenfoot.playSound("opening.mp3");
    }
    private GreenfootSound mulai = new GreenfootSound("ms.mp3");

    public void started() {
        mulai.setVolume(70);
        mulai.play();
    }
    public void act(){
        if(Greenfoot.getRandomNumber(1000)<4){
            addObject(new awan(), 853, Greenfoot.getRandomNumber(70));
        }
        if(Greenfoot.getRandomNumber(100)<1){
            addObject(new ufo(), 853, Greenfoot.getRandomNumber(479));
        }
    }
    public void tambah(){
        counter.add(20);
    }

    /**
     * Called when game is up. Stop running and display score.
     */
    public void selesai()
    {
        addObject(new skor(counter.getValue(), getWidth()/2, getHeight()/2);
        Greenfoot.playSound("end.mp3");
        Greenfoot.stop();
    }
}
```

➤ counter



The screenshot shows a Java IDE window titled "Counter - Tembak-Pesawat-main". The menu bar includes "Class", "Edit", "Tools", and "Options". The toolbar has buttons for "Compile", "Undo", "Cut", "Copy", "Paste", "Find...", and "Close". A "Source Code" dropdown is visible in the top right. The code editor displays the following Java code for the Counter class:

```
/**
 * Write a description of class Counter here.
 *
 * @author Abdur Rozaq, Robbal Baroya, Rifka Adestya Gustam, Nasrullah
 * @version 1.0.0
 */
public class Counter extends Actor
{
    /**
     * Act - do whatever the Counter wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    private int value = 0;
    private int target = 0;
    private String text;
    private int stringLength;

    public Counter()
    {
        this("");
    }

    public Counter(String prefix)
    {
        text = prefix;
        stringLength = (text.length() + 2) * 16;

        setImage(new GreenfootImage(stringLength, 24));
        GreenfootImage image = getImage();
        Font font = image.getFont();
        image.setFont(font.deriveFont(24.0F)); // use larger font
    }

    updateImage();
}

public void act() {
    if(value < target) {
        value++;
        updateImage();
    }
    else if(value > target) {
        value--;
        updateImage();
    }
}

public void add(int score)
{
    Greenfoot.playSound("coin.mp3");
    target += score;
}

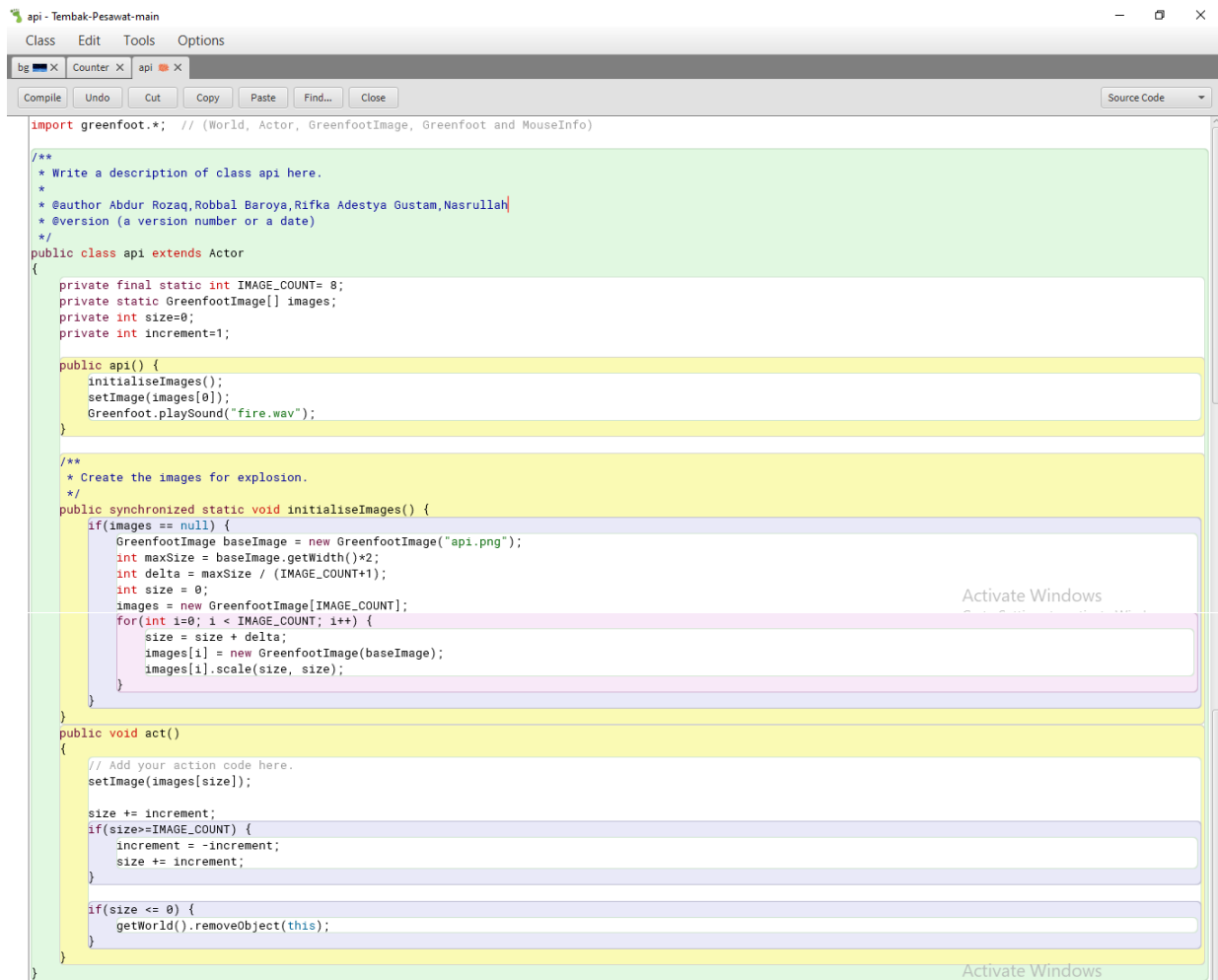
public void subtract(int score)
{
    target -= score;
}

public int getValue()
{
    return value;
}

/**
 * Make the image
 */
private void updateImage()
{
    GreenfootImage image = getImage();
    image.clear();
    image.drawString(text + value, 1, 18);
    image.setColor(Color.WHITE);
}
}
```

Three "Activate Windows" watermarks are visible on the right side of the code editor.

➤ api



```
import greenfoot.*; // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)

/**
 * Write a description of class api here.
 *
 * @author Abdur Rozaq,Robbal Baroya,Rifka Adestya Gustam,Nasrullah
 * @version (a version number or a date)
 */
public class api extends Actor
{
    private final static int IMAGE_COUNT= 8;
    private static GreenfootImage[] images;
    private int size=0;
    private int increment=1;

    public api() {
        initialiseImages();
        setImage(images[0]);
        Greenfoot.playSound("fire.wav");
    }

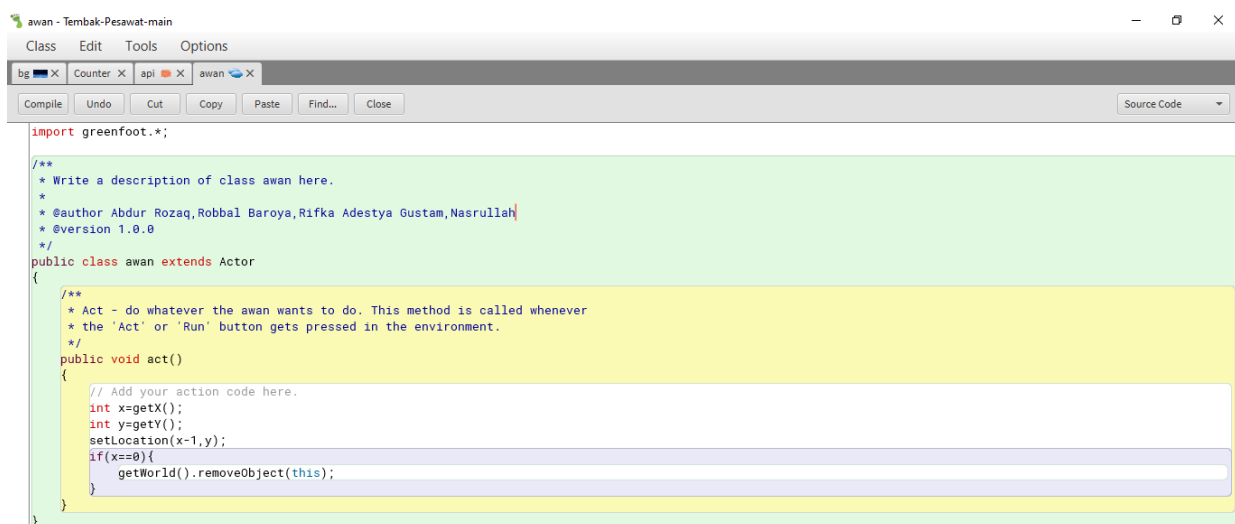
    /**
     * Create the images for explosion.
     */
    public synchronized static void initialiseImages() {
        if(images == null) {
            GreenfootImage baseImage = new GreenfootImage("api.png");
            int maxSize = baseImage.getWidth()*2;
            int delta = maxSize / (IMAGE_COUNT+1);
            int size = 0;
            images = new GreenfootImage[IMAGE_COUNT];
            for(int i=0; i < IMAGE_COUNT; i++) {
                size = size + delta;
                images[i] = new GreenfootImage(baseImage);
                images[i].scale(size, size);
            }
        }
    }

    public void act()
    {
        // Add your action code here.
        setImage(images[size]);

        size += increment;
        if(size>=IMAGE_COUNT) {
            increment = -increment;
            size += increment;
        }

        if(size <= 0) {
            getWorld().removeObject(this);
        }
    }
}
```

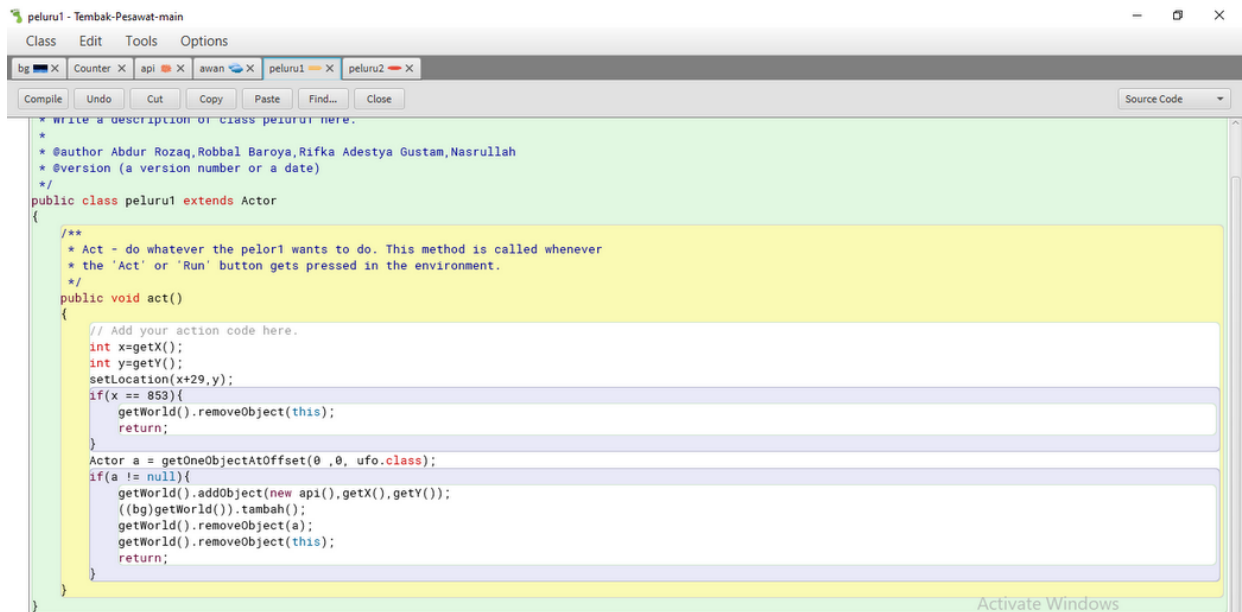
➤ awan



```
import greenfoot.*;

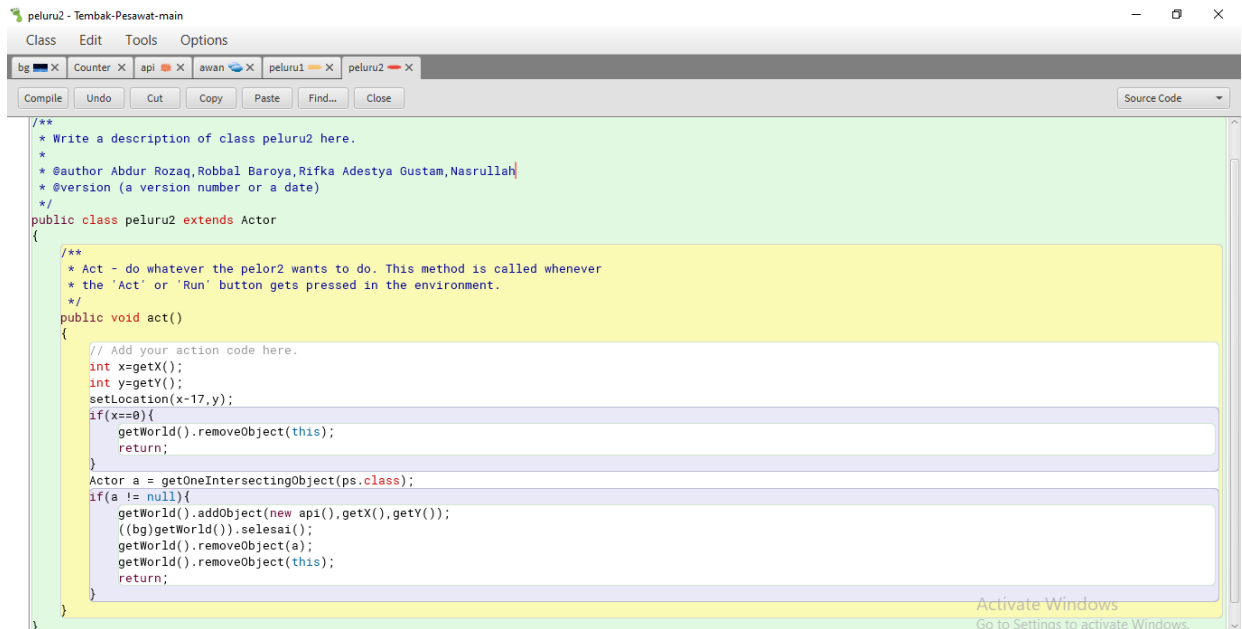
/**
 * Write a description of class awan here.
 *
 * @author Abdur Rozaq,Robbal Baroya,Rifka Adestya Gustam,Nasrullah
 * @version 1.0.0
 */
public class awan extends Actor
{
    /**
     * Act - do whatever the awan wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    public void act()
    {
        // Add your action code here.
        int x=getX();
        int y=getY();
        setLocation(x-1,y);
        if(x==0){
            getWorld().removeObject(this);
        }
    }
}
```

➤ peluru1



```
/**
 * Write a description of class peluru1 here.
 *
 * @author Abdur Rozaq, Robbal Baroya, Rifka Adestya Gustam, Nasrullah
 * @version (a version number or a date)
 */
public class peluru1 extends Actor
{
    /**
     * Act - do whatever the pelor1 wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    public void act()
    {
        // Add your action code here.
        int x=getX();
        int y=getY();
        setLocation(x+29,y);
        if(x == 853){
            getWorld().removeObject(this);
            return;
        }
        Actor a = getOneObjectAtOffset(0,0, ufo.class);
        if(a != null){
            getWorld().addObject(new api(),getX(),getY());
            ((bg)getWorld()).tambah();
            getWorld().removeObject(a);
            getWorld().removeObject(this);
            return;
        }
    }
}
```

➤ peluru2



```
/**
 * Write a description of class peluru2 here.
 *
 * @author Abdur Rozaq, Robbal Baroya, Rifka Adestya Gustam, Nasrullah
 * @version (a version number or a date)
 */
public class peluru2 extends Actor
{
    /**
     * Act - do whatever the pelor2 wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    public void act()
    {
        // Add your action code here.
        int x=getX();
        int y=getY();
        setLocation(x-17,y);
        if(x==0){
            getWorld().removeObject(this);
            return;
        }
        Actor a = getOneIntersectingObject(ps.class);
        if(a != null){
            getWorld().addObject(new api(),getX(),getY());
            ((bg)getWorld()).selesai();
            getWorld().removeObject(a);
            getWorld().removeObject(this);
            return;
        }
    }
}
```

➤ ps

➤ skor

➤ ufo

```

ufo - Tembak-Pesawat-main
Class Edit Tools Options
bg Counter api awan peluru1 peluru2 ps skor ufo
Compile Undo Cut Copy Paste Find... Close Source Code
/**
 * Write a description of class ufo here.
 *
 * @author Abdur Rozaq,Robbal Baroya,Rifka Adestya Gustam,Nasrullah
 * @version 1.0.0
 */
public class ufo extends Actor
{
    /**
     * Act - do whatever the ufo wants to do. This method is called whenever
     * the 'Act' or 'Run' button gets pressed in the environment.
     */
    public void act()
    {
        // Add your action code here.
        int x=getX();
        int y=getY();
        setLocation(x-2,y);
        if(x==0){
            getWorld().removeObject(this);
        }
        if(Greenfoot.mouseMoved(null)){
            MouseInfo mouse=Greenfoot.getMouseInfo();
            if(mouse.getY()>(y-7) && mouse.getY()<(y+7)){
                getWorld().addObject(new peluru2(),getX(),getY());
                Greenfoot.playSound("p2.wav");
            }
        }
    }
}

```

➤ hasil

