Chapter 5: Methods (Solutions)

Solution to Task 35: Baking a Cake

public class MyKara extends Kara

{

public void act()

{

drawRectangle(21, 4);

}

public void drawRectangle(int width, int height)

{

int i = 0;

while (i < height)

{

putLeafs(width);

turnAround();

multiMove(width);

// go to next line

turnRight();

move();

turnRight();

i = i + 1;

}

}

public void putLeafs(int count)

{

int i = 0;

while (i < count)

{

putLeaf();

move();

i = i + 1;

}

}

public void multiMove(int steps)

{

int i = 0;

while (i < steps)

{

move();

i = i + 1;

}

}

public void turnAround()

{

turnLeft();

turnLeft();

}

}

Solution to Task 36: Candles on Cake

public class MyKara extends Kara

{

public void act()

{

drawRectangle(21, 4);

drawCandles(10);

}

public void drawCandles(int count)

{

int i = 0;

while (i < count)

{

move();

turnLeft();

putLeafs(3);

turnAround();

multiMove(3);

turnLeft();

move();

i = i + 1;

}

}

public void drawRectangle(int width, int height)

{

// ...

}

public void putLeafs(int count)

{

// ...

}

public void multiMove(int steps)

{

// ...

}

public void turnAround()

{

// ...

}

Solution to Task 37: Candles for Age

public class MyKara extends Kara

{

public void act()

{

drawRectangle(21, 4);

int age = intInput("How old is your grandmother?");

drawCandles(age / 10);

}

public void drawCandles(int count)

{

// ...

}

public void drawRectangle(int width, int height)

{

// ...

}

public void putLeafs(int count)

{

// ...

}

public void multiMove(int steps)

{

// ...

}

public void turnAround()

{

// ...

}

}

Solution to Task 38: Layered Cake

public class MyKara extends Kara

{

public void act()

{

int age = intInput("How old is your grandmother?");

drawLayers(age / 10 - 5);

}

public void drawLayers(int layers)

{

int currentWidth = 21;

int i = 0;

while (i < layers)

{

drawRectangle(currentWidth, 2);

move();

move();

currentWidth = currentWidth - 4;

i = i + 1;

}

}

public void drawRectangle(int width, int height)

{

// ...

}

public void putLeafs(int count)

{

// ...

}

public void multiMove(int steps)

{

// ...

}

public void turnAround()

{

// ...

}

}