1 **import** edu.sjcny.gpv1.\*;

2 **import** java.awt.\*;

3

4 **public** **class** Aggregation **extends** DrawableAdapter

5 { **static** Aggregation ge = **new** Aggregation();

6 **static** GameBoard gb = **new** GameBoard(ge, "Aggregation");

7 **static** Hat[] hats = **new** Hat[6];

8 **static** SnowmanV8 sm;

9

10 **public** **static** **void** main(String[] args)

11 {

12 hats[0] = **new** Hat(40, 100, Color.RED, 20, 17);

13 hats[1] = **new** Hat(120, 100, Color.ORANGE, 25, 21);

14 hats[2] = n**e**w Hat(200, 100, Color.YELLOW, 20, 17);

15 hats[3] = **new** Hat(280, 100, Color.GREEN, 40, 34);

16 hats[4] = **new** Hat(360, 100, Color.BLUE, 30, 25);

17 hats[5] = **new** Hat(440, 100, Color.MAGENTA, 35, 29);

18 sm = **new** SnowmanV8(250, 250);

19

20 showGameBoard(gb);

21 }

22

23 **public** **void** draw(Graphics g)

24 {

25 g.setColor(Color.BLACK); **//the hat rack**

26 g.fillRect(20, 95, 460, 5);

27 **for**(**int** i=0; i<hats.length; i++)

28 {

29 hats[i].show(g);

30 }

31 sm.show(g);

32 }

33 **public** **void** keyStruck(**char** key) **//call back method**

34 {

35 **int** newX, newY;

36

37 **switch** (key) **//to move the snowman**

38 {

39 **case** 'L':

40 {

41 newX = sm.getX() - 2;

42 sm.setX(newX);

43 **break**;

44 }

45 **case** 'R':

46 {

47 newX = sm.getX() + 2;

48 sm.setX(newX);

49 **break**;

50 }

51 **case** 'U':

52 {

53 newY = sm.getY() - 2;

54 sm.setY(newY);

55 **break**;

56 }

57 **case** 'D':

58 {

59 newY = sm.getY() + 2;

60 sm.setY(newY);

61 }

62 }

63 **//acquiring a new Hat**

64 **for**(**int** i = 0; i<hats.length; i++)

65 {

66 **if**(sm.collidedWith(hats[i])) **//a hat is chosen**

67 {

68 sm.setHat(hats[i].clone()); **//clone the hat and add it to sm**

69 }

70 }

71 }

73 }

**Figure 7.25 The application Aggregation.**